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WHERE IS PHILOSOPHY GOING?[1]

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Some years ago Max Planck published a small book with the title *Where is Science Going?* in vigorous protest against the idea that the doctrine of relativity in general and the new quanta physics in particular mean that "the quest of the absolute becomes eliminated from scientific progress." That it seems to be time to raise a similar question with regard to philosophy was suggested to me at a recent conference held at Farnham Castle on the relation between science and philosophy, at which the new school of logical positivism was strongly represented by some of the ablest of the younger men. In listening to what they had to say on this youth movement, as they described it, I felt that the few hours left for the discussion of their view were insufficient to enable its critics to make the best of their case, and I am glad to have this opportunity of indicating more fully the grounds of the difficulty which, with others, I feel in accepting it as the final word on the scope and function of philosophy.

The origin and development of the movement of which this doctrine is the outcome is writ large in the course that philosophical thought has taken during the last half-century in the University of Cambridge. Henry Sidgwick was by general admission its most influential thinker from the seventies to the end of last century. He was himself a staunch, if a cool-headed and cautious supporter of the traditional view of philosophy as concerned with the whole range of human life, and therein not less with judgments of value and the norms they imply than with judgments of fact. The former like the latter have their source in the common reason of mankind

[1] An amplified form of an address given at the Annual Meeting of the British Institute of Philosophy on June 30, 1937.

and are susceptible of the same accuracy of statement as they. "It is the primary aim of philosophy," he wrote, "to unify completely, bring into clear coherence all departments of rational thought, and this aim cannot be realized by any philosophy that leaves out of its view the important body of judgments and reasonings which form the subject matter of ethics."[1] In spite of this declaration, Sidgwick himself made no attempt in his great book on *Methods of Ethics* to carry out any such programme, but on the contrary renounced it as beyond its scope.[2]

This left it open to his most distinguished follower, G. E. Moore, while still renouncing all forms of naturalism and holding that the idea of goodness has an objective meaning independent of our individual feelings and desires, to deny that it is capable of further analysis, or of being included in a comprehensive system of philosophy of the kind that Sidgwick had in view. The instability of this position led Bertrand Russell first to take the further step of denying the independence of our ideas of value of our own subjective feelings. "Questions as to values," he wrote, "lie wholly outside the domain of knowledge. That is to say, when we assert that this or that has value we are giving expression to an emotion, not to a fact which would still be true if our personal feelings were different";[3] secondly, and as a corollary of this, to exclude from the purview of philosophy all reference to practical or aesthetic interests. "What it (philosophy) can do when purified of all practical taint is to help to understand the general aspects of the world and the logical analysis of familiar but complex things. It offers in its own domain the kind of satisfaction which the other sciences offer, but it does not offer a solution of the problem of human destiny or the destiny of the universe. . . . What it brings with it is a sense of power and a hope of progress more reliable and better grounded than any that rests on hasty and fallacious generalizations as to the nature of the universe at large."[4]

It was this view that was seized upon by Russell's brilliant pupil, Ludwig Wittgenstein, and carried a step further still in the denial to ethical and aesthetic predicates of any real meaning.

The essence of the view in this its fullest developed form, so far as our question is concerned, is to rule out from the field of profitable discussion, and therefore from philosophy, all reference to anything that falls beyond the world of facts which are verifiable to the

[1] The passage is quoted by Whitehead in *Science and the Modern World*, p. 176, to emphasize the impoverishment which philosophy suffers on any other view in being deprived of its "proper rôle as a constant critic of partial formulations."

[2] *Op. cit.*, p. 12. [3] *Religion and Science*, p. 230.

[4] *Our Knowledge of the External World* (1914), pp. 17 and 30.

intellect by logical processes. This is not to say that there is no field for discussion beyond the limits of the special sciences. There still remains the criticism of the terms and categories employed by them, which have been taken over on credit from ordinary language and are infected with the same obscurity and ambiguity from which it suffers. There is thus a wide field for philosophy not only in the co-ordination of the results of the different sciences but in the clarification of their common language. What we are warned against is any attempt to extend the function of philosophy to include judgments about good and bad, higher and lower, as touching upon matters beyond human ken. That we do as a matter of fact make statements about what is good and bad, better and worse, is not denied. What is denied is that these statements are more than an expression of our own feelings about things or our attitude to them; in other words, that they are judgments in any true sense of the word, instead of being merely our feelings masquerading in the form of judgments. Otherwise they express nothing and are, strictly speaking, unmeaning, "senseless" (*unsinnig*) in Wittgenstein's phraseology. But to do Wittgenstein himself justice, he had no intention of denying that there *is* a meaning behind them or even that there are indications of it in the world. "There is indeed the inexpressible. This shows itself; it is the mystical."[1] Moreover, he had the insight to see that logical analysis in the end is hoist with its own petard. "My propositions," he concludes, "are elucidatory in this way: he who understands me, finally recognizes them as senseless."[2] As well they may be, seeing that logical truth is itself a term of value and therefore in the end meaningless. But these admissions failed to make much impression on his younger followers. They had tasted blood in the critical part of Wittgenstein's teaching, and were hot to follow up the trail to the death of traditional philosophy as it has come down to us from the time of Socrates.

What are we to say of the grounds upon which this evacuating theory rests?

Before attempting an answer I should like to say for myself that, with regard to what might be called the *positive* as contrasted with the *positivist* side of these contentions, I see no reason to doubt that logical analysis, as interpreted by the school, will show itself to possess all the value for science that is claimed for it, and that, even on the more negative side, there is a distinct gain in so clear a recognition of the fact that the natural sciences *qua* natural can have nothing to do with questions of value in the classes of things with which they deal. It is an old contention of philosophy that the science, e.g. of biology, has no right to speak of higher and lower, instead of merely simpler and more complex, and that it

[1] *Tractatus Logico-Philosophicus*, p. 187, prop. 6·522. [2] *Op. cit.*, p. 189.

merely stultifies itself by doing so. But to admit this is one thing, to hold that there can be no rational discourse as to anything that cannot be verified as given fact, and accordingly to deny that there can be any accurate thinking as to what it is right to do or to feel about things, situations, or ideas is quite another. In view of any such denial it is surely time to recall Plato's great saying, which Sidgwick took as the motto of his book, to the effect that "it would surely be absurd to exert ourselves to attain accuracy with regard to things of little worth while denying that the greatest things are those that are susceptible of the greatest accuracy." The Platonic view may have been interpreted too much in what Mr. Gilbert Ryle, in his delightful article in the last number of *Philosophy*, has called an inflationist sense. But that it is wrong in the main is a conclusion to which some of us would consent to be dragged only by the most convincing chain of reasoning. What are the considerations on which this extreme form of deflationism, or as I would rather call it, defeatism, is founded? I will select three which seem to me to have been chiefly responsible for it.

1. The first is an argument founded on the claim of philosophy to be, like science, a theoretic study engaged in the search for truth; from which it is taken to follow that, as there can be no truth about anything but fact, philosophy can be concerned with nothing else but this. "I regard philosophy," writes a supporter of the main thesis of the school, "as a theoretic inquiry in pursuit of truth. Valuations are not theoretical assertions claiming to express truth. The question whether the thing has value is not to be determined by any criterion quite independent of our actual valuations."[1] With the first part of this statement there can be no quarrel. Philosophy is theory. It aims at truth about the nature of the world and our experience of it. In view of any attempt to mix up edification with it, as has been too often done, it is well to have this clearly stated. It is further true that valuations are not theoretic expressions claiming to represent truth in the sense in which judgments of fact do so, or to be amenable to the same criteria. But on what ground more solid than a mere verbal assonance can we go on to say that there can be no theory about what is right or wrong in morals, beautiful or hideous in aesthetics, no standard by which such judgments may be vindicated as having a truth and justice of their own? I believe there is none at all. Reserving the further consideration of this whole point for a moment, I pass to a second ground which has more substance in it.

2. It is that of the difficulty of attaining any true impartiality on subjects into which valuation other than that of truth of fact enters, and which touch our emotions so deeply as do those of right

[1] W. D. Lamont, *Aristotelian Society Supplementary Volume*, xv, p. 226.

and wrong, good and bad, beauty and ugliness; and of the tendency of our systems of ethics, aesthetics, and metaphysics to be an index of our wishes rather than of our honest thoughts. I believe that Mr. Russell and others of his school have done well to warn us against this perversion; but the warning has not been left to their generation to give. Ever since Socrates declared that the uncriticized life is not worth living, it has been a constant refrain in the works of the older philosophers. It is now some fifty years since writers so different as Sidgwick and Bradley called the attention of my own generation to the extent to which our national philosophies were, in the words of the latter, "choked with prejudice." But they never believed, and would have stultified their own intellectual endeavours if they had believed, that it is impossible to carry an impartial truth-loving attitude of mind into subjects that touch our emotions even at the deepest. All that they asked, and all that metaphysical philosophy now asks, is permission to take its life in its hands and be judged like science itself by its success or failure in the solution of its problems. It is right that when we propose to cross a stretch of wood or moorland we should be warned of the thickets and bogs that will beset us. But to be forewarned is to be forearmed, and the goal we have in view may be something for which it is worth while to take the risk. If we take to heart Goethe's great maxim, "Sich dem Halben zu entwöhnen und im Ganzen, Guten, Schönen resolut zu wohnen," and recollect, as Whitehead puts it, that the true rôle of philosophy is "to be the constant critic of partial formulations," we may consider ourselves fairly safe in our adventure.

3. But undoubtedly the main influence that has operated in the formulation of the new positivism has been the dominance in the mind of a particularly brilliant group of Cambridge men of the interest in physics and mathematics, the attitude of mind which these studies demand, and the logic that underlies their methods—leading to the suspicion of the credentials of all propositions which, like those that express value, are insusceptible of verification by the same processes of reasoning. I have already quoted Russell's statement of this position. Younger writers have only rung the changes upon his text, and sought support for it in a long line of writers, past and present, British and foreign, who since Hume have adopted a similar uncompromising empiricism. Can their contentions really be maintained (I do not say in the face of what the great line of philosophers from the beginning have taught on the subject of goodness; their right to teach anything at all is just what is challenged, but) in the face of our everyday experience? Is it really true that there can be no rational discourse on anything that cannot be verified as given fact, or deduced from definitions and axioms,

and that there can be no intelligent criticism of what it is right to do or to feel about situations or things.

I believe that, as in the other considerations already mentioned, there is an element of fundamental truth mixed up with exaggeration and error in this doctrine. It certainly is true that our sense of the value, unlike our sense of the observable qualities, of things is primarily a response of the emotions to something in the object, as apprehended by sense and intellect, of which it is the bearer. But this does not and cannot mean that the response is to something which only touches us superficially, and which, beyond the emotion, has no further import for us as rational beings. On the contrary, it means that it is the response to something which touches us at a level deeper than knowledge, and appeals, as knowledge does not, to the whole personality—something with which, as rational responsible beings, we are concerned at least as deeply as we are with the truth of our knowledge of actual fact. This being so, the response is never merely emotional or beyond the reach of the censorship of a self which "looks before and after and pines for what is not"—which can judge of the appropriateness (what I have already called the "truth") of the attitude, whether of will in the world of practice or of feeling in the world of aesthetic appreciation. Behind the emotional expression there is always the sleepless sense of a being who has to be *satisfied* with what he does and feels, as well as with what he thinks, and who in the end can be satisfied with nothing which does not correspond to a criterion of what is in itself the best. It is surely a fact of our everyday experience that we subject our ideas about what it is good, or what it is our duty to do, or, again, our desires and feelings about things, ideas, and situations to criticism, suggested either by our own further reflections upon them or by what is pointed out to us by others. Immediate feelings of pleasure or pain may perhaps be beyond the reach of argument. But that our moral and aesthetic reactions can be altered and are constantly being altered by such criticism is surely the commonest of experiences. How often after consideration do we ask ourselves whether we really desire a thing or whether a thing really deserves our admiration as beautiful in nature or in art.

Appeals to the idealist writers of the early part of the century are not likely to carry weight with the new school. They certainly had not its already extensive literature before them. But they attacked in advance with characteristic trenchancy its central dogma, as when Bosanquet wrote: "There may be some justification for supposing that you cannot be argued into or out of a simple experience of pleasure—though unquestionably in many cases you can—but to suggest that it cannot be argued and explained in what lies the power of objects and ideas ultimately to satisfy a mind—in

what lies their value to a mind—seems contrary to everyday experience as well as to the whole bearing of aesthetic, ethic, and metaphysic."[1]

It may well be that the criterion of what I have called "the best" which underlies such criticism is difficult to discover. Philosophers have worn themselves out in their efforts to discover it, and there is still large diversity of view among them about it. But it seems to me mere defeatism, least of all becoming in a youth movement, to declare the search for it vain and useless. This would be to give up the hope of ever obtaining rational insight as to what constitutes the wisdom of life, and offers a way of escape from the troubles and confusions that have beset men in every age, and beset them in a peculiar way in that in which we ourselves live. Let me quote the words of a great philosopher, all the more acceptable because he is a German and belonged to the great philosophical age in Germany:

"For what good," asks Fichte in a letter to Jacobi,[2] "is the speculative standpoint and the whole of philosophy therewith, if it be not for life? Had humanity not tasted of this forbidden fruit, it might dispense with all philosophy. But in humanity there is a wish implanted to behold that region lying beyond the individual; and to behold it not merely in a reflected light but face to face. The first who raised a question about God's existence broke through the barriers, he shook humanity in its main foundation pillars and threw it out of joint into an intestine strife which is not yet settled, and which can only be settled by advancing boldly to that supreme point from which the speculative and the practical appear to be at one. We began to philosophize from pride of heart, and thus lost our innocence: we beheld our nakedness, and ever since we philosophize from the need of our redemption."

I will end with another quotation from a very different writer, whose name, after what I have already said, you may have a difficulty in guessing. "Knowledge if it is wide and intimate brings with it a perspective in which values are seen more clearly. Even more important than knowledge is the life of the emotions. A world without delight and without affections is a world destitute of value. These things the scientific manipulator must remember. All that is needed is that men should not be so intoxicated by new power as to forget the truths that were familiar to every previous generation. Not all wisdom is new, nor is all folly out of date."

[1] *Principle of Individuality and Value*, p. 297. For the application of the same principle to art see the same writer's quotation from Nettleship in *Value and Destiny of the Individual*, p. 42 foll.

[2] Quoted Wallace's *Logic of Hegel* (Translation), p. 394.

The words are Mr. Bertrand Russell's[1]—the fruit surely of a riper wisdom than those above quoted. I commend them to those of his followers who have been misled by the others.

Coming back to ourselves, I believe that there is nothing more important at the present time than to keep philosophy on these broad and hopeful lines, instead of seeking to evacuate it of all reference to the meaning of our lives here and to questions of what makes them worth living, and turn it into a merely logical discipline. To accept such a limitation of it would be equivalent to offering as the only alternatives to the pure naturalism, against which the best minds of our time are in revolt, either a return to tradition and authority, a region in which we have to accept what we are told and to think for ourselves at our peril, or a mystical appeal to an inner light, a region in which anything can be thought and nothing can be either proved or disproved. There is surely a better way, and it is one at least of the functions of anything that aspires to the name of an institute and a journal of philosophy, to lend a helping hand to those who are in search of ths better way.

[1] *The Scientific Outlook* (1931), p. 278.

GREAT THINKERS

(XII) DAVID HUME

B. M. LAING, M.A., D.Litt.

David Hume, a member of the well-known Border family of Home, was born on April 26, 1711. After a period of preparatory training he matriculated at Edinburgh College in 1723, although he may have entered earlier. His course during this period is obscure; according to his own statement the curriculum was mainly literary; on leaving College he records that his interests lay predominantly in this direction, and, being left to his own choice, he was able to indulge his inclinations. An attempt to train him for a legal career ended in failure; and he continued to live at his ancestral home of Ninewells, to the west of Berwick, for some years, devoting himself with all the ardour of youth to the excogitation of what he conceived to be a new philosophical idea. There ensued, partly, there is reason to believe, as a result of intellectual over-exertion, recurrent ill health; and safety was sought in a more active commercial career. The latter tried out at Bristol, ended after a few months.

His next step was to take up residence in France, first at Rheims, then at La Flèche, where he composed the *Treatise of Human Nature.* In 1737 he returned to England and entered upon negotiations for the publication of that work, an event successfully accomplished in 1739 and 1740. He was greatly disappointed over the lack of recognition given by the public; this failure seems to have influenced, in part at any rate, the future direction of his activities. He blames himself largely for the result, considering that he had been too hasty in publishing; to some extent he assigns it to a lack of metaphysical interest on the part of the public. He seeks to meet the latter factor by writing in a more popular way upon more popular subjects, the consequence being a series of moral and political essays in 1741–42; and he attempts to meet the former cause by recasting the *Treatise* into such a form as to make a popular appeal, the result being published in 1748 and ultimately called the *Enquiry Concerning the Human Understanding* and followed in 1751 by a corresponding revision of the third book of the *Treatise.* The moral and political essays were a success, but there was comparatively little popular interest in the *Enquiry.* In 1752 he published the *Political Discourses* which gained him a reputation, especially on the continent. The outcome was that, apart from the *Dialogues*

Concerning Natural Religion and the *Four Dissertations*, including the *Natural History of Religion*, which were probably all prepared even by this date, the former alone being published posthumously and showing evidence of frequent revision and amendment, Hume deserts metaphysical speculation in favour of history.

The *Enquiry* has generally until recently received more attention than the *Treatise*; it is written with greater directness and ease, both in regard to language and exposition; but it is concentrated upon one main issue, namely the problem of causation, the *Treatise* on the other hand in addition dealing with the nature of and problems involved in Space and Time and containing also a lengthy discussion of the belief in an external world. But the argument of the *Treatise* is difficult to follow, in spite of Hume's literary ambitions. It manifests the spirit of the pioneer—even in tackling History Hume feels himself to be a pioneer—who, however, gets somewhat lost because unable to master fully the lie of the land; and it ends with an ingenuous confession of failure to give meaning to certain fundamental issues. This confession, which few philosophers are honest enough or courageous enough to make, combined with the large amount of destructive criticism expressed in the course of the argument, has been considered to be evidence of the philosophical bankruptcy of his principles. The apparently negative character of his views induced Thomas Reid at an early stage to enter the field with the theory that his doctrine was sceptical and was the logical consequence of the "ideal theory" as stated particularly by Locke and Berkeley—an interpretation which has justification but which by implication fails to do justice to what Hume himself saw clearly.

Hume, as well as his intimate friends, felt that his philosophy might be, or was, hostile or offensive to prevailing sentiment in religion and philosophy. He had reason to know this on several occasions in Scotland where the theological atmosphere showed itself distinctly unfavourable to him. Such hostile reaction, however, though understandable in the light of eighteenth-century conditions, is irrelevant to the real character of his teaching and constitutes no argument against it. To have convictions and to adhere to convictions is one thing, which Hume never denied; to inquire into the foundations of such convictions, which Hume sought to do, is another. His concern is with *evidence*—its nature and application; and it is permissible to suggest that the examination of certain issues, such as mathematical ideas, cause and effect, an external world, a self, moral and political ideas, liberty and necessity, and even miracles, the discussion of which has provoked so much resentment against him, was conducted primarily with reference to the question of evidence and not from the purpose of deliberately destroying prevalent convictions. It is true that modern philosophy—

indeed all philosophy—had been concerned with this question, as appears from the efforts, stimulated by a fairly vigorous sceptical theory which denied that *any* evidence of a nature decisive in any one direction existed or could be found and which, perennially rearing its head, offered a continuous challenge to find a criterion of truth and to show its effectiveness in application, to provide an answer. But in the eighteenth century, especially on the continent, the problem of evidence is explicitly discussed as a problem; Huyghens and s'Gravesende devote attention to it, the latter in an essay entitled *Sur l'évidence*; and it is such a problem that interests Hume. From this point of view the essay on Miracles, which Hume had intended to incorporate in the *Treatise* but eliminated therefrom in response to friends, finds a natural place in that work and need in no way be regarded as a careless or deliberate insult to the susceptibilities of other people.

Rigid insistence upon evidence can lead very easily, as is seen not merely in the case of professing sceptics themselves but even in the case of Descartes and of Locke, to doubt regarding a greater or a less number of commonly accepted beliefs. Its effect on Hume is in some respects similar; but, unlike them, he has present to his mind the fact that, even when a belief is not justifiable logically on the evidence, that belief nevertheless may be entertained. This fact cannot be ignored, for it is philosophically interesting; nor can the belief in question be summarily dismissed as doubtful or as false, for something has contributed to its formation and it suggests that belief is not primarily a rational or a logical affair. It is necessary therefore to carry out an analysis of beliefs in order to discover what factors contribute to their formation. Thus Hume at the very beginning of the *Treatise*—and he ends the volume on the same note—insists upon the point that man, besides having knowledge, is also the knower and that consequently "human nature," which gives the title to his first work, has an important bearing upon the character of the sciences. By approaching philosophy with this in mind he believes he is preparing "an almost entirely new" foundation for a complete system of the sciences. He may seem in doing so to be confusing logic with psychology or the question of validity with that of origin, a charge frequently made against him. It is not true, however, that he discards logic as traditionally understood; it is equally not true, it may be remarked in passing, even though contrary to widely accepted interpretations, that he is primarily a logician, such an interpretation being based on a misunderstanding of what he is doing when he discusses inductive inference. His whole discussion moves within the framework of prevailing logic comprising intuition, deduction, and induction, with the accepted distinctions between them. What he does emphasize

is that there comes a point where this logic reaches its limits and requires to be supplemented by an additional theory. But this innovation points not to his discarding logic but to his being an epistemologist whose problem arises because of the rigid application of that logic and who is very much concerned to get the public to appreciate the issue which he himself is convinced is inherent in human knowledge and belief.

A feature emerges here which serves to distinguish Hume from the sceptics, with whom he has so frequently been identified. These utilized logic in order to destroy the foundations of knowledge and they did so specifically by showing that the ideas present in the sciences were contradictory and generally by contending that if logic is subjected to self-criticism no standard of logical evidence could be sustained. There is this much affinity between Hume and them that he accepts a considerable amount of their destructive criticism—in fact, as recent investigation has shown, incorporates it almost literally in his own discussion. Examples of this are his criticism of mathematical ideas such as points and infinite divisibility, the statement of atheism and materialism by Philo in the *Dialogues Concerning Natural Religion*, and, in less obvious form, in his critical examination of certain views of causation and of certain theories regarding the existence of an external world. In other cases the weapon which he uses for destruction is one forged by the sceptics. But it is safe to say that so far as Hume expresses destructive criticism of widely accepted beliefs he has borrowed the materials and no originality can be claimed for him. Hume, in so far as he is critical, is repeating what had already been said. On the other hand, however, he did try to emphasize that he had a constructive suggestion to make; there are signs in his correspondence and in records of his behaviour that he was surprised and disappointed at the non-recognition of what he sought to say. The criticism and destruction are carried out in order to clarify a problem and suggest a solution. The constructive part may be meagre and largely tentative; in places it may be unacceptable; Hume himself finally expresses doubts concerning some of it; but whether he failed or not, he is concerned with a problem that remains.

Hume's problem has its origin in the fact that in all sciences and quasi-scientific studies such as politics and ethics not merely do certain processes of reasoning occur but there appear certain ideas and beliefs without which the reasoning could not be carried on and would not have the character which it does possess. Mathematics or rather that branch of it called geometry—for Hume confines himself mainly to it—is a good instance of demonstrative reasoning; but he does not, except incidentally for the special purpose of emphasizing its difference from induction, enter upon a

detailed examination of such demonstration. He concentrates on the ideas characteristic of mathematics and accepted as essential to it in the eighteenth century: they were those of points and infinitesimals and the relations of *equality*, *greater than*, and *lesser than*, the former involving the ideas of space and time. They were the subject at that time of great philosophical interest and vigorous controversy, much of it linking up with the ancient Zenonian arguments concerning infinite divisibility. The development and successful employment of the conception of infinitesimals made the controversy important because that conception constituted the key of the position from which mathematics was being successfully applied to the explanation of physical processes. It seems curious but it is vouched for by mathematical philosophers that the apparently highly rational science of mathematics rested until quite recently on no logical foundation. The philosophers of the seventeenth and eighteenth centuries found themselves unable to put a logical construction upon mathematical ideas. Bayle argued, in favour of scepticism, that they were through and through contradictory. None of the three possibilities—that space is made up of mathematical points, that it is made up of atoms (physical points), that it is infinitely divisible—could be logically defended.

Hume accepts the destructive argument of Bayle, carried out on a basis different from that expressed in Hume's criterion of the truth or soundness of an idea, which criterion therefore must be regarded as in no way providing the motive at this point—nor probably at other points—for Hume's supposed critical destructiveness and scepticism. He does not, however, stop with this scepticism of Bayle. He believes, soundly enough, that the mathematicians, in speaking of limits and infinitely small quantities, were getting at something important but the difficulty was to interpret what it was they were talking about. Whatever it was it was not something which had been reached by a process of demonstration, for in that case the process of reasoning could be stated; but no such reasoning was known nor could it be found. At the same time Hume, impressed by the applicability of mathematics to nature and its usefulness as an instrument in the hands of the physical, experimental scientist for giving precision to his results, in this respect adopting one of the two alternative views about mathematics which had been much discussed at least from the time of Galileo, is influenced by the consideration that any interpretation of mathematical ideas must be one that accounts for such applicability. He is not the only philosopher of the eighteenth century to stress this consideration. It leads him to find the source of these ideas in observable entities or sense-data; and instead of his criterion of truth being responsible for his theory of mathematics it is his view of what is demanded

of mathematics that accounts for the criterion he accepted. This demand could be met—in his opinion could alone be met—if points, for instance, *existed*. Later philosophers[1] of the present day maintain a similar position when they object to the definition of a point as a *limit* of a series on the ground that there is no certainty of the *existence* of such a limit. Unless points exist, according to Hume, and therefore have magnitude, then lines, areas, and generally space could not be said to exist; and consequently mathematics and the application of mathematics to the interpretation of nature would remain inexplicable. The conception of a point as that which has no magnitude must thus be rejected. There were those who, like Leibniz, held that infinitely small quantities exist, but there is, according to Hume, no evidence that they do; such a conception lacks definiteness and precision and is actually a confusion with the idea of the *indefinite*, based on the repetition of the process of division carried on indefinitely by the imagination. In actuality there is a limit to divisibility. The view that mathematical ideas are merely "in the mind" will not account for their applicability to nature. All these difficulties are met and the requirements of mathematics are satisfied, in Hume's opinion, by the conception of the *minimum visibile* or, to include touch, the *minimum sensibile* —a notion revived from ancient Epicureanism. Above all such a notion guarantees the *existence* of points; they are the limits of visible or tangible series. On this basis Hume seeks to define space; points so defined are capable of juxtaposition; and he believes that the view renders the conception of space free of contradictions and makes mathematics consistent.

It follows that the conception of infinity is untenable and that, as Hume expressly states, it is not necessary to Mathematics—a consequence which leads to an extreme *finitism* on which mathematical opinion at present is divided. His suggested solution rests on an empirical basis. The ideas of equality, greater, and less are likewise derived from observation and comparison of entities. A common objection, which Hume seeks to meet, is that to derive mathematical ideas in this way is to deprive mathematical objects of that perfection and absoluteness which are essential to the precision, accuracy, and certainty characteristic of mathematics. He gives a simple and direct denial to this claim for perfection in mathematical objects and for precision, accuracy, and certainty. The idea of such perfection is based on the indefinite continuation of the process of comparison by the imagination which gives no more "perfect" object. He does not, however, raise the question whether the denial of precision, accuracy, and certainty in mathematics is necessarily required by the denial of "perfect" objects,

[1] E.g. Broad, *Scientific Thought*, p. 42.

and whether these characteristics have some other foundation, the idea of perfectness in straight lines, in equality, and so on, being irrelevant to the matter. He seems so obsessed by the usefulness of mathematics in application that his theory is primarily concerned with questions posed with reference to that issue.

Though Hume restates in the *Enquiry*[1] the substance of this view of mathematics elaborated in the *Treatise*, nevertheless in the former[2] he also puts forward a doctrine quite Cartesian in character and difficult to make consistent with it. "Though there never were a circle or triangle in nature, the truths demonstrated by Euclid, would for ever retain their certainty and evidence." Mathematical certainty and evidence are thus not to be understood by reference to what exists, but are a matter of perception (or intuition) of relations between ideas. Yet, of course, *all* ideas are ultimately on his theory derived from observed entities. The distinction between "relations of ideas" and "matters of fact" which is by no means easy to understand on the basis of his philosophical position is relevant to his view of mathematics; but it is also made to mark the difference between mathematics and physics and to draw attention to the distinctive problem involved in the latter. It is an acceptance of the prevalent eighteenth-century distinction between the two sciences, mathematics in fact being then regarded as providing a completed support for physics. It has to be understood, however, so far as Hume is concerned, in the light of the distinction expressed in the *Treatise* between variable and invariable relations. It is evident, of course, that though our idea of a stone may be derived from observed stones, yet we could never from a consideration of our idea of a stone perceive or intuit that it was at the distance x from another stone or that it was covered with moss. The relation of distance between stones is a variable one. In mathematics it is otherwise; the relation of the square on the hypotenuse of a right-angled triangle, for instance, to the sum of the squares on the other two sides is one that is constant for all such objects. The difference lies in the fact, obscured by the ambiguous word *relation*, that, as Hume recognizes by his reference to *proportion* though not emphasizing its importance, the mathematical *relations* in question are *ratios* and differ from the *relations* referred to in the other cases. Now ratios involve a comparison of *relations* by virtue of their magnitude; a triangle, an angle, a circle are all primarily a matter of relations (spatial) between lines; and geometry is a formulation of ratios between lines or between angles. In this respect mathematics is essentially relational in character. To reason geometrically it is thus necessary to perceive or intuit the relations which are to be compared and are the basis

[1] Sect. xii, Pt. ii. [2] Sect. iv, Pt. i.

of ratios. The certainty of these ratios is not dependent on any reference to existence; but their applicability to nature or the applicability of mathematics to the interpretation of nature, presupposes that they are ratios between relations which are observed or are observable in nature, though such applicability may not be exact.

The problem connected with physical science is one concerned with the discovery of *relations* in nature or between existences and primarily, according to Hume and probably the prevalent view of the time, with one kind of relation, namely that of cause and effect. He accepts as a fact, never questioned by him, that science is the search for causes; and he is also prepared to admit throughout that causal conclusions are "justly made." This point is of importance because it signifies that he is not trying to *prescribe* meanings of terms to the scientist but is seeking on the basis of the scientist's own work to find out what meanings are to be given to the terms. A search for causes presupposes that there are causes or rather a belief that there are causes and that what characterizes a cause is known or believed to be known. The end of Hume's long and elaborate discussion in Part III of the *Treatise* shows very definitely that he was seeking a definition of the word cause, a statement of the characteristics which anything, to be a cause, must possess; at the same time he was concerned with the term as used by the scientist or as it entered into the body of knowledge, not with some metaphysical *causality*; and consequently any definition must be also one that had applicability in science. In these respects the issue is exactly parallel to that examined in the case of mathematics; only it is more complicated, for obviously, in view of the laborious efforts required, causes are not as causes directly perceived or intuited; the causal relation between events or objects is not a sense-datum. It is complicated also because there enters for consideration the causal principle "every event must have a cause" and this in turn raises a question regarding the basis of conclusions formed by generalization.

Hume is not the first historically to raise these issues involved in a science of nature. The sceptics of ancient times had argued that the *pros* and *cons* remain equally indecisive on the question of the existence of causes, and part of their argument refers to the difficulty in using the idea of cause. In the eighteenth century writers, such as s'Gravesende in Holland, in a *Discourse on Evidence*, distinguish between mathematics with its certainty based on demonstration and physical science using analogy or induction, based on the principle of the uniformity of nature, though they were ready to maintain that physical science did thereby attain a certainty, even if different from that of mathematics. They sought

to demonstrate the principle of the uniformity of nature by means of a knowledge of the existence of a Divine Being; and the latter knowledge was in turn established demonstratively in the manner of mathematical knowledge. Hume does not adopt this somewhat Cartesian position; and the reason is probably to be found in the rejection of innate ideas by Locke, backed up more especially by the impressive achievements of Newton, whose experimental science became dominant in Hume's time. But for him, in consequence, a grave problem ensues. The eighteenth century had committed itself to the empirical or experimental standpoint; and the empirical method must be taken seriously. His much maligned essay on Miracles can in consequence be seen in quite another light and the place intended for it originally in the *Treatise* becomes intelligible. The procedure of accounting for the uniformity of nature by reference to the Divine existence and character must be reversed; the latter must be established inductively; and being the conclusion of an inductive inference, it must rest on the principle of the uniformity of nature, if this is the basis of all induction. The clue to the Divine existence must, in fact, as is argued in the *Dialogues Concerning Natural Religion*, lie in the presence of constant and uniform laws in the universe: that work discusses just the possibility of building up a knowledge of God on this basis by means of analogy, said to be the only possible means. In the essay on Miracles one part of the discussion is devoted to maintaining that on such a view it is impossible to accept the idea of miracles, for the idea or definition of the latter involves the Divine Being and yet also involves an interruption and hence a denial of the uniformity of nature or the constancy of physical laws which constitutes the main evidence for the Divine existence. To believe both in miracles and in the teleological inductive argument is thus logically contradictory. The uniformity of nature cannot accordingly be established demonstratively by means of a knowledge of the Divine Being. Nor can it be defended inductively, in the manner of other inductions like physical laws, for any such attempt must use the principle itself. Nor is it intuitively certain. Thus the three possible traditional ways of defending it are closed.

The relation of the idea of the uniformity of nature to the principle of causation has been a matter of considerable controversy. Hume considers that the latter is the basis on which we are able to transcend present experience, that it is thus the foundation of induction and generalization; and hence it follows that in his opinion it fulfils the function supposed to attach to the principle of uniformity. The uniformity in the universe is due to the presence of causes in that universe; to establish the principle of causation is thus to account for uniformity. For this reason the idea of causation

is the more fundamental. Nevertheless, Hume is unable to admit that the principle of causation "whatever begins to exist must have a cause," is either intuitively certain or capable of demonstration; it is not the former because of the peculiar nature of the relation in question, a nature contrasted with that of mathematical relations and also because a causal relation is not a sense-datum; it is not the latter because any attempted proofs, at least hitherto given, presuppose the matter at issue. To this it may be added in support of Hume—what is in accord with his view—that where the ideas are not clear or the meaning of the terms is not decided there cannot be "intuition," and that an attempt to prove the existence of causes presupposes already the idea of a cause and of causation and points to its having been derived in some way prior to any demonstration. It is obvious that it cannot be inferred inductively seeing that it is supposed to be the basis of induction.

Such is the critical and destructive part of Hume's discussion on causation. Statements are so frequently made that he denied causation or made causation subjective with the consequent denial of the possibility of inference and of knowledge that his further discussion requires careful attention. He starts from the fact or supposition that the science of nature is concerned with the discovery of causes, and he formulates the meaning of the term cause by reference to its use in scientific investigation. He finds that that meaning is complex, for it involves spatial and temporal relations; a lighted match is a cause of an explosion only if it is related in a specific spatial way to the box of powder and if it is lighted prior to the explosion. But another and very important component, which Hume, far from denying, makes one of the main issues in his argument, is *necessity*. What is this necessity? Though it may seem an irrelevant over-refinement, yet it is requisite to distinguish two things. Necessity is asserted in the proposition "every event must have a cause"; what is here asserted to be necessary is the universal presence of causal relations between events; and, as already seen, Hume can find no justification for this assertion. There is, however, another necessity, namely, as a character of any causal relation between two objects or events, in virtue of which the occurrence of the one must ensue from the occurrence of the other. Possibly there has been a belief that necessity in both respects was being asserted in the proposition "every event must have a cause," the second being implied in the word *cause*. Nevertheless, there are the two senses. Hume admits the second, and for this reason, in order to elucidate its nature, proceeds to consider the more specific question how we decide that a particular x is the cause of y or that y must happen as a consequence of x or how we infer one from the other. His answer, given in terms to secure conformity with his

demand that an idea must be validated by reference to observed entities, is that this necessity is a habit of expectation generated by experience of the frequent conjunction of x and y. It is possible, however, that his language fails to express the nature of the result he reached by his analysis.

The problem of causation has generally been considered to be a problem of inference, and Hume also connects the two. Yet in spite of this prevalent belief what the exact relation of the two is is not very clear. What is a mere truism is that the search for causes or causal relations presupposes a belief that there are such in the universe: this accounts for the behaviour of searchers but has no relevance to inference. One interpretation is that the causal principle guarantees the validity of the conclusions reached inductively. This it simply does not do; and Hume in asserting so was right. It is impossible to find in the principle any evidence that any specific assertion of a causal relation between two objects or events is true; and it is likewise impossible to infer from it what objects are causally related. It is a curiosity of philosophical literature that it is supposed man has a knowledge of causal laws and that yet there is so much dispute about the nature of causation or the meaning of the term cause; if we do know causal relations, there need be no controversy. Hume reversed the preceding interpretation, he maintained that causation is to be interpreted in the light of inference, not inference in the light of causation—a procedure which may be likened to the modern mathematician's interpretation of space on the basis of the character of mathematical equations. What Hume is therefore saying is that necessity is epistemological; this assertion might still be the basis for asserting its ontological status also; but Hume rules out the latter possibility so far as knowledge of nature goes, though his statements do frequently suggest that in nature there may be more ultimate connections to which our knowledge does not reach, in which case, however, they remain irrelevant to our inferences. Necessity is known only as a peculiarity of inference, not of things; it is a characteristic of the relation of the *knower* to a proposition because of the evidence for his accepting it. The world simply *is* so and so; there is no *must* present in it. What are observed are uniformities, and the building up of science consists in formulating wider uniformities by a process of generalization based on analogy. These observed uniformities play an important part in inference, constituting the premisses of the latter; they must not be confused with the idea of the uniformity of nature which is often said to be the principle of induction or of generalization. Hume denies this claim on behalf of the principle, for, far from providing a basis of inductive inference, it simply expresses what the mind or imagination is doing; it is a statement

about the nature of generalization, not a statement about the universe that justifies generalization. The essential nature of the imagination is to generalize. Even in the formulation of causal laws generalization is involved, for when a causal relation has been found to exist between a specific *a* and *b*, it is concluded that it holds between any *a* and any *b* at any time at any place. The maxim "same causes, same effects" is not one that justifies generalization but one stating again the nature of generalization.

Such a view, it has been objected, fails to guarantee certainty. This objection assumes, contrary to the history of science, that scientific generalizations do possess certainty, and it also assumes that when a causal relation is asserted to hold between *a* and *b* that assertion is certain. It is no objection to Hume that he does not assign to science a character that it may not, or even does not, possess or that no scientist would now claim for it. Many regular sequences, even that of day and night at one time, have been taken to be causal relations; but Hume's theory is quite capable of dealing with such erroneous beliefs, for the discovery of causes is an experimental adventure and the erroneous belief is corrected—and can be corrected only—by additional data or evidence. On the basis of experience rules can be built up to regulate investigation, and Hume's formulation of rules in the *Treatise* for this purpose is apt to be overlooked. A more serious objection—still however assuming certainty, indeed an absolute certainty, in scientific propositions—is that regular sequence and Hume's theory of inference fail to account for inferability, deducibility, implication, for which something more than regular sequence is required. If, however, as the critic admits, this something more is not known, then it must be declared irrelevant to inference and what is required for inference. If regular sequence does not account for inferability, as it occurs in science, it is permissible to suggest that inferability does not rest at all on causation but on something else, namely on the possibility of treating the sequence quantitatively and thus of applying mathematics, thereby introducing into experimental science a certainty which is derived from and characterizes mathmatics. A criticism that may be made against Hume is that, holding inductive inference to be the same wherever it occurs—the same in the case of the animal, the plain man, and the scientist, of the rudimentary science and the highly developed science—he sought the nature of causal inference in what was common to all these cases, and having to be content with the irreducible minimum thus found, failed to do justice to the distinctive features of the more developed sciences with their quantitative methods and reasoning based on quantity. On the other hand, the modern research scientist, on reflecting over his procedure, finds much of the philosophical

controversy about causation unintelligible or irrelevant, and demands no more than observed uniformities and some such notion as that of a pattern or scheme. It is true that the modern scientist may think of causality and determinism in relation to inference; yet a consideration of the instance of electrons (or contemporary ultimate entities) where *both* velocity *and* position seem unknowable at the same time and which troubles the scientist because in consequence he cannot predict the position and velocity at a later moment, shows that the clue to causation or determinism in nature lies in the character of inference and also that such inference involves only factors such as position and velocity, there being no factor in addition expressible as causation. From this it follows that the theory of causation should start from the necessity characteristic of inference, a necessity which is epistemological; and what should be kept in mind is whether this necessity can be accounted for only by supposing causality in nature or simply by the data, especially in their quantitative aspect, which are present to the mind of the reasoner.

Hume in his theory of causation is making use of the same criterion as he uses in his discussion of mathematics and for the same reason, namely, not merely to define a cause but also to define it in such a way as to provide evidence for its scientific applicability to nature. Connected with this criterion is Hume's much criticized maxim that whatever is distinguishable is separable. This is not an assertion of atomism, epistemological or otherwise, for that interpretation confuses *separable* and *separate*. Its significance is not positive but negative and is to be understood in relation to the idea of *evidence*: its function is to guard against assuming or asserting relations between objects when none is observed or when relevant evidence is lacking. Hume's formulation of the criterion itself to the effect that every idea is a copy of an impression or sense-datum is not defensible and in the course of his discussion he shows some recognition of its inadequacy. The idea of causation with which he is so much concerned is one which cannot be said to be a copy of an impression; nor is his distinction between simple and complex impressions and between simple and complex ideas free of difficulty. The complex idea of causation cannot on his own theory be a copy of a complex impression. Many scientific ideas, like that of an electron, could not be said to be merely copies of an impression, for it is doubtful if an electron is observed. The idea of an electron is no doubt based upon something observed but there enter into it constituents derived by analogy with simpler observed entities. Nevertheless, Hume is right if, allowance being made for his speaking in the language of the eighteenth century, he intends to stress the principle of observability, taken to imply that an idea must rest

on something observed, that in having impressions we are in touch with *existence*, and that the belief or conviction which attaches to ideas is something ultimately traceable to impressions. Ideas, if they claim to refer to existence or to the actual universe must be verifiable, as contemporary Logical Positivism insists; but the verifiability is not always a simple matter of finding an impression of which it is a copy: it is often a matter that involves the need of tracing the processes—deductions and analogies—by which the idea has come to be formulated on the basis of a datum that may be very unlike the idea. Since Hume lays stress upon language, the issue may be modernized by substituting the term *meaning* for the term *idea*. A word has a meaning; and a statement, involving several words, may have a meaning, or it may have none, even though each component word may have one. *Prima facie*, there is a distinction between *meaning* and *validity*: in fact an apprehension of meaning is a pre-condition of establishing the validity of a statement. Consequently to show that a word, like *dragon*, has a meaning because that meaning can be reduced to observed factors such as a certain shape, size, tongue, fire-breathing, is apparently not equivalent to showing the validity of that meaning, validity signifying here applicability to existence in nature. This lack of equivalence may easily be overlooked; yet it is the source of a special difficulty. Hume meets it in his theory by treating the questions of the meaning of a word (that is, an idea), the validity of that meaning (or idea), the derivation of the meaning (or origin of an idea) as interdependent questions or even as one question. It is a misunderstanding of his problem and of his argument to criticize him for ignoring the question of validity or of confusing it with the question of origin.[1] His answer is that the meaning of cause, the validity of this meaning, the origin of this meaning, and the discovery of causes are all linked together: an answer which illumines the "paradoxical" procedure of his argument. Causation has to be defined in the light of the process of discovering causes, and the definition of causation indicates the process whereby causes are to be sought. He thereby not merely gives a meaning to causation but provides a theory regarding the verifiability of that meaning and thus of its validity.

The causal relation, according to Hume, is the basis of all knowledge of matters of fact. Yet there is one matter of fact—or presumed to be so—namely the existence of external bodies (and of a self), for a knowledge of which that relation seems to fail; and either such existence is not a *matter of fact* or else the causal relation is not the sole foundation of such knowledge. Hume's discussion is

[1] Kant is concerned with validity and links this question with that of origin. But he never discusses the *meaning* of causation.

difficult to follow, its drift is not easy to grasp, and the general interpretation has been that he argues for a sceptical conclusion, namely that existence of bodies is not a matter of fact—at any rate not known to be so—and that his theory of causation, plus his criterion, leads him to it, thereby the inadequacy of both being revealed. In the course of his argument he distinguishes between the *vulgar* view and the philosophic view, the latter insisting upon a difference between datum and object unrecognized by the former. The vulgar belief obviously cannot therefore rest on a causal inference from the datum to the object; nor, Hume contends, is the principle of causation applicable to a case where object and datum are in question, for that principle holds only between perceptions.[1] Yet the belief is entertained and an account of it must be given. In attempting this he lays stress upon *constancy* and *coherency* as characteristics of impressions, combined with the working of the imagination which transforms resemblance of impressions into sameness or identity, which thus creates a belief in a constant and continuing impression, and which, in accordance with its nature noticed elsewhere by Hume, overcomes the difficulty due to interruptions in impressions by generalizing the observed continuity into a complete continuity. In this way the supposition of a continued and independent existent is reached, and the supposition enables experience to be rendered coherent. Apart from the rôle played by coherence and constancy, which may be better understood by reference to a much more elaborate treatment of the problem in a recent work[2] and which raise questions about what and how much is to be considered as *given*, Hume himself decides that such an account does not provide a sufficient defence of the belief; for, in the first place, it shows that the idea of a *continued* existent, from which that of an *independent* existent follows, rests on a confusion of resemblance with sameness; and, in the second place, the operation of the imagination points as in the case of mathematical ideas to the notion of an external and continued existent being only the notion of an imaginary ideal and does not guarantee that there are such existents or that a world of external bodies exists. Philosophy, on the other hand, shows that impressions are not independent nor continuant, a conclusion which so impresses it that it proceeds to insist upon a distinction between sense-datum and object, on the basis of which it attempts to establish by a causal argument, illegitimate in Hume's view, the existence of a world of bodies. It is, he considers, inevitably doomed to scepticism.

His treatment of the idea of a self follows generally parallel

[1] Professor G. E. Moore in *Philosophical Essays* considers Hume's contention weak; it seems valid within the framework of Hume's doctrine.

[2] H. H. Price, *Perception.*

lines and ends with a similar conclusion. The result of the argument is that the idea of an independent, continuous material universe and the idea of a self cannot be theoretically defended. Whether Hume's theory ends in scepticism, as is generally held, depends however on the interpretation of what Hume is doing. The issue, as he states it, is how we can claim to know there are bodies on the basis of sense-data, to which in view of his criterion they must be reducible. His treatment of this issue rests on the assumptions that data are *internal* and *occurrent* (or fleeting) and hence distinct from each other. The latter assumption is supported, other evidence being lacking, by the *prima facie* character of data; and though it gives rise to special difficulties for a theory, it is not without justification. It is otherwise with the former assumption. If data, as data, do not give externality and independence, as Hume admits, neither do they give internality and dependence. The distinction, in fact, is a philosophical one and presupposes a known distinction between mind and body; the latter distinction must therefore have been effected on some basis other than the former. Hume recognizes this when in the *Treatise* he maintains that the philosophical theory rests upon and has no more validity than the vulgar view possesses. Philosophy in undermining the common-sense view is actually undermining its own foundations. In the *Enquiry* he states even more emphatically that the philosophical view, making use of the idea of causation, can by no possible argument be justified. But if this is so, the only supposed evidence for the internality of sense-data disappears. Hume himself sees clearly here as well as in his examination of modern philosophy in the *Treatise* that this philosophical theory of sense-data leads to scepticism; and Reid's discovery about the tendency of the "ideal theory" was not a novel one. Hume in consequence ought not to have accepted the internality of sense-data in his account of the vulgar view. The posing of his problem would then have had to be altered. He would have had to show that data had characteristics which provided a basis for grouping them into mind or minds on the one hand and into bodies on the other. His apparently sceptical conclusion is thus due to his becoming confused in his presuppositions because of his permitting a philosophical doctrine to enter into them and proves neither a sceptical intention nor the final inadequacy of his type of method. He is simply unfaithful *both* to his criterion *and* his view of causation, as well as to his declaration in the *Treatise* and in the *Enquiry* that the ultimate cause of impressions is inexplicable by reason.

It is possible, however, to find in Hume something more constructive, hinted at in his enumeration of three views—the vulgar, the philosophical, and the true, the last being one which will approximate to the first. Hence presumably something of the account

given of the vulgar view will remain in a true philosophy. In spite of a supposed scepticism, he is accordingly found saying that the *self* is a causal system of perceptions; and this assertion can be applied equally to bodies. Such a declaration is consistent with both his criterion and his view of causation. What he attacks deliberately is the *theory* that the self is a simple, indivisible, unchangeable entity or substance in which qualities inhere; the effort to know the self never reveals or discovers any such self but only a system of perceptions. A parallel view can be taken of bodies and is supported by many of his statements. Such an interpretation finds further confirmation in the *Dialogues Concerning Natural Religion* where Cleanthes maintains a view of this kind against Demea and particularly against Philo the sceptic, whose arguments presuppose traditional ideas. No rigid demarcation can be effected between different systems, even between that system which comes to be labelled a self or mind and those systems labelled bodies, or collectively matter. Nevertheless, perceptions can be roughly delimited into systems. Bodies cannot, any more than the self, be known otherwise than as fundamentally temporal in character; they are never known as fixed, permanent existents. Permanence belongs to them only because and in so far as they are systems. Strictly therefore there is no metaphysical issue distinct from and additional to the issue pursued by mathematics and physics, the latter being both an acquisition of a knowledge of bodies and the method whereby the existence of bodies is established and the meaning of the term defined.

The necessary restriction of the present discussion to Hume's theory of knowledge does not imply that it is more important than his ethical and political theories, though this relative estimate has generally been expressed, largely by the neglect of the latter. Historically his ethical and political views have considerable significance in regard to the nature and foundation of ideas and institutions and an increasing amount of present-day theory is reasserting much that was already set forth by Hume. It is true that his theory of knowledge is general in character and for that reason it is more fundamental than the more specific studies of morals and politics and determines Hume's treatment of the latter; but for the same reason they contribute to an understanding of his theory of knowledge.

On a review of Hume's work it is necessary to acknowledge not merely his acute, penetrating, and challenging destructive analysis, in which if he is not wholly original he is certainly a master and which exposed certain fundamental issues involved in human knowledge, but also his pioneer spirit in elucidating scientific ideas and defining scientific terms so as to be applicable to the task of

scientific investigation and thereby at the same time clarifying the nature and foundations of human knowledge. Not merely Kant with his idealism and Reid with his realism but also pragmatism and contemporary logical positivism—not an insignificant progeny —find in Hume a progenitor.

ACTION[1]

PROFESSOR T. M. KNOX

THE great philosophers have generally held that there was some kind of interdependence between philosophy and practice. An unexamined life, they have maintained, is not worth living; and if there is to be anything to examine, life must first be lived, i.e. a practical experience is a propaedeutic to philosophy. But although Plato, for instance, thought that the task of government could be well performed only by the philosopher, he does not seem to have thought that fifteen years' practical experience had any beneficial influence on the philosopher's subsequent work of philosophic contemplation. Aristotle explicitly prefers the theoretical to the practical life, and the resultant divorce of theory and practice leads to quietism and so to ethical scepticism.

In such a scepticism much contemporary moral philosophy languishes, and it is perhaps worth while to call attention once more to the benefits that accrue to both philosophy and practice from their close and vital association. Practical life, devoid of the guidance of philosophic principle, falls into confusion and ineffectiveness; philosophy, abstracting itself from what men do, can issue only in failure to discover any principles to guide human conduct. Such a sceptical issue in philosophy is generally a sign of life and advance, because the price of the discovery of new truth is the doubting of what has been taken as true hitherto. But that doubt ceases to have much claim on consideration when it culminates, as it does in some contemporary writers, with the substitution, for the modest "I cannot understand," of the dogmatic "there is and can be nothing there to understand." If, however, we are to escape from a sceptical outcome of ethical inquiry, and find principles which may be of service in a troubled and conflicting world, we must learn from the market-place as well as from the cloister, and draw our material from the rough and tumble of everyday life as well as from the more rarefied regions of philosophic speculation. To limit itself to the pure air of those regions is the characteristic defect of much contemporary moral philosophy; for, although the problems of ethics arise only out of men's actions, contemporary ethics concentrates its main attention not on action, but on the analysis of

[1] This essay is the substance of an Inaugural Lecture delivered on December 1, 1936, from the Chair of Moral Philosophy in the United College of St. Salvator and St. Leonard, St. Andrews.

certain concepts, notably those of right, good, and value, and holds that the understanding of moral conduct is subsequent to and dependent upon knowledge of the nature of those concepts. Thus, knowing and not doing becomes central in ethics, and the inquiry is directed along the path which leads ultimately but surely to scepticism by way of such paradoxes as "We never have any reason to suppose that an action is our duty,"[1] or "A man can be morally good although he does wrong acts."[2]

To turn ethics into an analysis of concepts, however, is an error of method, for it means using the method of mathematics, a method whose success is dependent on its being applied to a subject-matter that is either abstract or hypothetical. It is no less an error of method to attempt to construct a *science* of human behaviour,[3] for to employ in the study of action a method found useful in the study of nature is to ignore the difference between an occurrence in nature and a human act; the one is simply observed, the other must be understood from within, in the sense that we can look inside the mind of the agent and discern the processes of thought which led him to act as he did. The movements of the stars are events which we can observe, but all the understanding which we can have of them is to know the laws in accordance with which they take place. But, if we thought that, by this merely external observation, we could come to an understanding of human action, a biography would content us if it were a mere recital of the dates and events in its subject's life. The very existence of biography as a study of character, and of history as the understanding of the past, is testimony enough to our conviction that there is something about human action which differentiates it from everything else in the universe, namely the fact that men know what they are doing, as the stars do not, and have reasons for what they do, as jelly-fish have not. There is as close a connection between the self-conscious personality and his acts as there is between his thoughts and the words in which he expresses them; of that fact the student of ethics must never lose sight, and if he is to see it aright, his eyes must be those not of the mathematician or the empirical scientist, but of the historian.

The historian—and the moral philosopher—mean by *action* not simply what is sometimes called behaviour, i.e. the event which can be observed *ab extra*, nor simply the intentions or motives or thoughts which lie behind or lead to the behaviour, or the event, or the thing done; they mean both of these together, for they are the subjective and objective sides of the same thing, just as unin-

[1] Moore: *Principia Ethica*, p. 149.

[2] See e.g. Ross: *The Right and the Good*, pp. 155–156.

[3] See Collingwood: *Human Nature and Human History*, in the *Proceedings of the British Academy*, vol. xxii, and Fite: *The Living Mind*, esp. pp. 24–55.

telligible in isolation from each other, as the concavity and the convexity of a curve. It will follow from this view of action—the view implied by the very existence of history—that the most elementary truth about a man's actions is that they are done consciously and so are deliberately chosen. To see that this view is true we need only reflect that we make a distinction in the events of our lives between what happens to us and what we do, and that the ground of this distinction is choice. The precondition of choice, however, is self-consciousness; for to choose means to be conscious of ourselves as choosing, and to be conscious of alternatives between which our choice may be made. And this consciousness must be reflective, that is, it must involve memory and imagination. It must involve memory, for just as we could not be conscious of present happiness except by contrast with unhappiness experienced in the past and now remembered, so we are conscious of ourselves only by contrast with an experience of the world and of our own past. It must involve imagination, since alternative courses of action to meet a given situation do not yet exist and must therefore be imagined if they are to be apprehended at all.

It follows that to study choice is the same thing as to study action, for just as action is the unity of a subjective process of thought and an objective event, so choice is a fusion of the subjective with the objective, a reflective process of choosing with an act chosen. It is important to notice, however, that since choice is a unity, its two sides, the choosing and the thing chosen, do not succeed one another either temporally or logically; in the choice both sides are simultaneously actualized, just as are concavity and convexity when we draw a curve. It is therefore not open to us to say that the value of one side, either the choosing or the thing chosen, is dependent on the character of the other, for that would be to give priority to one as against the other. Now, some moralists maintain that what is good is good only because we choose it; while others say that our choices acquire merit only if we choose what is inherently good. Both of these views isolate the choosing from the thing chosen, and judge the one by reference to the other; and against both of them I am arguing that no such isolation of one side of choice from the other is possible, for neither side exists prior to the other, and that the two sides must be judged either correlatively or as a single whole.

When it is said that it is my choice which endows its object with goodness, what is meant is that goodness is simply subjective; but if goodness is subjective preference and nothing more, then that preference must be based on feeling, which is private and individual, and not on reason which is objective and universal. But to suppose that all our action is based only on feeling or intuition, and not on

thought, is absurd. For, if it were, we could never be in any doubt about what we wanted, since to doubt is to think, whereas it is because such a doubt really exists that we are offered a hard choice when we are told to do as we please. To tell a man what to do simplifies his life by exempting him from the trouble of making up his mind what he wants. When we find ourselves in a quandary with no preference for walking on the cliffs or on the sands, and we wish to take a walk, we toss a coin in order to have *some* reason for doing one thing and not another. Nor need this surprise us, for we have seen already that to choose means to choose reflectively and so thoughtfully and with reasons for our choice. It is only by leaving these reasons out of account that the subjectivist is able to deny all objectivity to goodness; but to leave them out of account is like trying to write a history of the Reformation without reference to Luther.

The objectivist, on the other hand, admits that I have reasons for my choices but insists that these are grounded in the object chosen, and he thus ascribes to the object the priority which the subjectivist ascribes to the choosing. But in so doing he ignores the element of creativity in action and presupposes that, when we choose, we select one alternative from amongst many that are somehow presented to us from without, already endowed with a characteristic rightness or wrongness in themselves. It is true that there is a certain superficial plausibility in the view that some of our choices are of this nature; for instance, it may seem to be the case, when a clerk in a Government department, minuting a document, is invited to indicate a preference for one of two courses of action, that one of them shall be inherently preferable to the other, and that his preference will be right or wrong in so far as it accords or not with the objective character of the alternative chosen. The same may seem to be true when a friend asks us which of two posts offered to him we would advise him to accept. It is instances like these, where a clear-cut issue is put before us for our decision, which objectivists in ethics usually select to justify their point of view. But to take examples of this type alone betokens too restricted an experience of practical life. For in many cases, and these are crucial in any attempt to understand action, the alternatives are not clearly defined at all until the choice is made. The objectivist leaves out of account the creative process of thought by which we gradually make up our minds what we want or feel our way to a decision, for it is during this process that the very alternatives, from amongst which we choose, actually come into being.

To minute documents put before one, or to answer questions clearly framed, calls for no exercise of initiative. On the other hand, progress in administration whether in a business or a University depends not merely on dealing with queries put on an agenda paper

by someone else, but on striking out new and untried paths. It is the idea which no one yet possesses that makes money for an industrial concern or advances learning in a University. Similarly, the building up of a vigorous personality is dependent on the exercise of the initiative which makes a man impatient of being a mere cog in a machine; and to achieve anything in philosophy or in any other study means not simply choosing between alternative theories propounded by other scholars, but giving a new thrust to the discussion or embarking research on a fresh and unfamiliar programme. The characteristic excellence of the managing director of an industry as distinct from that of his second in command, is just this capacity to initiate something and to keep his business alive and progressive by moulding its activities afresh in the light of some original and productive idea. To suppose that thought is simply the perception of objectively existing truth or that action is choice between fixed alternatives is to ignore the creative element always present in them both but most clearly visible when they both rise to their highest in initiative. On initiative, on vigorous, forward-looking, creative action depend an individual's strength of character and the progress of man and his institutions. But the peculiar difficulty of initiating anything new in either thought or action is precisely that of having no ready-made alternative courses of action between which to choose. Initiative is first the visualization and then the gradual definition of alternative lines of advance. As a man of initiative gradually makes up his mind in which direction next to shape his own life or to guide the advance of the institution under his care, as he devises one possible solution after another for the immediate practical problem which his forward-looking activity presents to him, alternative possibilities for action become clear to him in a more and more crystallized form; but they may never be quite clear to him until the moment when his final decision is made; that decision is the moment of choice and in it are simultaneously actualized the choosing, the thing chosen, and the things rejected. The eventual choice may actualize not any one of the possibilities previously framed and entertained, but rather some combination of them, and it is only upon the result achieved, upon both sides of the decision taken together, that a moral judgment may be passed. To endow with an objective rightness or wrongness the inchoate possibilities, whose very definition takes place only during the process of feeling one's way to a decision, is as superstitious as to suppose that there is a place where all the old moons are kept.

Therefore, when a man initiates a new course of action his reason for choosing one way and not another is not his apprehension of an objective character of goodness inhering in the object of his choice. But it does not follow from this that initiative can be exercised for

no reason at all. We have already seen that a man's actions are unintelligible apart from his thoughts and that it is the error of subjectivism to ascribe what men do merely to the operation of irrational impulse, and so to reduce all history and biography to myth or fairy tale. It is true that our decisions sometimes seem to be intuitive and to spring from a flash of insight and not from reasoned calculation; but when we are asked to choose between fixed alternatives, we must remember that they have become fixed only as a result of someone's vision and the process of initiative which has just been described, and similarly, when a decision seems to have been taken immediately without any process of thought, we must not lose sight of the fact that it has actually been mediated through a whole character and the past experience which has made that character what it is. When we get to the top of a hill the view bursts upon us instantaneously; but in order to enjoy that vision, we first had to put ourselves in a position from which it could be seen. In a quick decision, however unconscious of the fact we may be at the time of making it, our whole personality is implicit, a fact presupposed by biography as an attempt to understand, and to see as a pattern, the character of an individual and the events of his life.

The study of initiative thus reinforces and amplifies the conclusions to which we came earlier about the nature of action and its implications, namely (i) Action as choice is dependent on the reflective self-consciousness of the agent, and this means that he has reasons for what he chooses, though these may be present to his mind in varying degrees of clarity at the time of acting; (ii) those reasons are not grounded in the nature of the object chosen, since action is bringing into existence what does not exist already, and so it cannot be *subsequent* to the apprehension of objective characteristics already pre-existing in what it *creates*; and (iii) consequently, the value of what we choose is the correlative of the value of our choosing, neither prior to it as its reason, nor subsequent to it as its product.

This third point now requires further elucidation. To choose is to value one thing higher than another, or to think one thing *better* than another, and it follows, therefore, that as we reflect on our choices we can see implicit within them a standard of value or a conception of goodness. The things that we have chosen are those that we call good. But we have seen already that if one side of choice is judged, either the choosing or the thing chosen, the same or a correlative judgment must be passed on the other side. If, then, the things that we choose are those that we call good, the process of thought by which we come to choose them we must also call good. If we wish to reserve the description "good" for the agent himself, we may, if we please, attribute excellence to his thinking by calling it "reasonable" and to his course of action by calling it "right," for these

are *correlative* terms; but it will not be open to us to describe a man and the things that he does or the thoughts that he thinks in *opposite* ways; that is, we may not describe a man as good and his acts as wrong, for that will be like calling a coin a penny on one side and a half-crown on the other. If we criticize what a man *does*, we must pass a similar criticism on what he *is* or *thinks*—but before criticizing we must take account of the fact, just stated, that goodness is implicit in choice as such, and that consequently every individual and what he chooses at whatever time are in some sense good.

This view will seem distorted to those who are quick to pass adverse moral judgments on what people have done without first taking into account how they came to do what they did. Such judgments of acts in isolation from intentions are made, however, by those whom we stigmatize as "censorious," and they are made despite the fact that without taking a man's motives into account we cannot ascertain what it is that a man has done; if this were not so, a jury would never be faced with deciding whether a man's crime was manslaughter or murder, and we could not account for the fact, familiar to the historian, that the history of the events in a man's life cannot precede a judgment of his character, but can be ascertained only *pari passu* with the gradual formation of that judgment. To condemn people out of hand because they have done wrong in this or that way is often indicative of moral fervour which is not undeserving of respect, but which, in its impatience to judge, ignores the fact that if a man is worth judging even adversely, there is something of goodness in him; if he is accused of committing moral evil, the very accusation implies that he is *good*, in that he is at least a moral agent. Similarly, the theory that is worth refuting must at least be a theory, an attempt at truth, and more than an attempt, because, being thought by someone, it is an attainment of truth to some extent and in some degree. Evil is not unreal, nor is it an illusion; but its reality consists in the fact that it is an attainment of good, so far as it is chosen, though of too little good. We do not trouble to argue with an imbecile who is under the delusion that he is the Emperor of China; we do not condemn the slate which falls from a roof and kills a man, still less do we try to reform it; an argument can appeal only to the rationality within a man; moral suasion can appeal only to a moral agent by reference to whom alone have moral judgments any meaning. The drunkard, choosing to get drunk once more, is choosing good, since temporary relief from misery is all the good he knows. But to that extent he does know good and is good, or it would be absurd to say to him "be a man," or to tell him that his act is wrong, or to attempt to reform him. "There dwells a soul of goodness in things evil," if we will but refrain from hastily condemning them and try instead to understand them. All men

seek after the good[1]; God is not mocked; but some men are so blinded by unreason that the good is hidden from them under the disguise of some temporary gratification or the pursuit of some selfish advantage.

This does not preclude us from calling a man bad, but so to judge him means that we reject not only his way of life as wrong, but also his thoughts or motives as blind or unreasonable; at the same time, however, if we look at him from his own point of view as his biographer does, we shall have to admit that his badness is due to his deliberate choice, and that therefore in his own eyes what he chooses is good, just as his choosing is reasonable. To admit that his choice is reasonable from his point of view, and yet to assert that it is unreasonable from the point of view of an outsider sounds paradoxical, for we expect that what is reasonable shall commend itself as such to all intelligences. The paradox is removed if we reflect that, just as there is some goodness in every action, though too little in the actions which for that reason we call evil, so there is reasonableness in every man's thoughts, though too little in those that we call unreasonable. For however poor a man's reasons for acting may be, they are still reasons, and it is their presence which differentiates the action in which they are present from an animal movement or an event in nature. What we call evil is the attainment of good, though too little good, or too low a degree of good.[2] What we call unreasonable is the attainment of rationality, though too little rationality or too low a degree of rationality. This implies a doctrine of degrees of goodness and degrees of rationality, and the very mention of *degrees* in rationality should prevent us from confusing the rationality which we have been finding in man's actions with *raisonnement* or ratiocination or discursive thought.[3] To say that the bad man is unreasonable does not mean that he is illogical, so much at any rate we should have learnt from Aristotle's *Ethics*. To judge whether a man's reasons for acting are good or no we must test them with the yardstick of history, not with that of formal logic or of mathematical reasoning. The formal logic of the Pharisees could see no reasonableness in the plea that to pluck ears of corn on the Sabbath day was reasonable because the Sabbath was made for man. What is reasonable action at one time or place for one individual may not seem to be reasonable for another person at another time or place, and the question whether a given course of action is reasonable must be addressed to *someone*. He may answer that it is reasonable *to some*

[1] In the sense implied by Aristotle: *E.N.* vii, 13, 6.

[2] In this section on the nature of evil, I am greatly indebted to Collingwood: *Essay on Philosophical Method*, esp. pp. 82–84.

[3] On the difference between reason and ratiocination, see e.g. De Burgh in *Proceedings of the Aristotelian Society*, 1936–7, p. 8.

extent, thus adopting the view that rationality in human affairs admits of degrees; but what extent of rationality he allows to it will depend on his conception of rational action as such. That is to say, to admit that the bad man's act is good to some extent, and his thinking reasonable to some extent, means acknowledging some ideal or standard of goodness or rationality (i.e. of rational action) by reference to which the bad man's degree of achievement can be measured. Such a standard or ideal or norm is implicit in all our thinking and all our choosing. To be conscious of ourselves as thinking is to be conscious of the distinction between truth and falsehood, to aim at the one and to shun the other. To be conscious of ourselves as agents is to be conscious of the distinction between good and evil, to seek one and avoid the other. It is the standard of truth which guides our thinking and the standard of good which guides our choosing. But these standards are not external to man; if they were, we would first have to know their nature before we could either think or act; it is absurd, however, to make knowledge a precondition of thinking, and we have seen that to make knowledge a precondition of acting is to make action unintelligible. As a man looks back over his past thoughts and actions, he can perceive the standards of truth and goodness that are implicit in them, and so his conception at any time of what truth and goodness are, is dependent on what he has thought and what he has chosen. It is as true of the voluptuary as it is of the saint that what he takes to be good is dependent on his own achievement and his own character; what he seeks is dependent, that is to say, on what he is, or, as Pascal puts it, we seek God only because we have already found Him.

To think at all implies the presence within thinking of a standard of truth, to choose at all implies the presence within choice of a standard of goodness; but our conception of what these standards are varies as we look back and reflect upon past thoughts and past choices. We condemn our past choice as bad. Our reason spurns it as unreasonable. We have learnt better in the meantime. Yesterday's good fails to satisfy us to-day and is rejected as evil. This happens constantly in our experience, because the world is constantly changing. It changes because life is action, and action, as we have seen, is creative, is the initiation of new states of affairs; and this creative initiative is an aspect of thought as well as of action, for we have seen throughout that action and thought are inseparable. Thought is not always the perception of necessary connections in a real world already existent whether we think it or not; just as action is bringing into existence good that does not exist already, so thought at its best is calling new truth into existence.

What is the spur to this creative process? There can be but one answer, namely the clash between the ideal implicit within man's

nature as thinker and agent, and his present actual achievement. What calls forth the exercise of initiative whether in thought or action is the perception of something lacking in our present situation. We see that what we have achieved in thought or action promises or implies more than it fulfils. As we reflect on our past choices we see implicit in them a standard of goodness or rationality which is not made fully explicit in anything that we have yet chosen or in the character which we have so far formed. In thinking, a man strives to express the ideal of truth present in him as a thinker; similarly he strives in his actions to translate into reality the ideal of goodness which is implicit as a standard in the choices that he makes. This effort never wholly fails, since goodness is to some extent present in every action—no man entirely denies his manhood or escapes altogether from rationality—but the effort never wholly succeeds, for no one action is adequate to express the whole of the ideal, and perhaps it is because of this inevitable failure that a doctrine of the goodness of man's nature is not contradicted by the doctrine of his original sin. The consciousness of this failure of any single act to express the ideal is the spur to further action. If it were a complete failure it would not be a spur but a deterrent; if it were not a partial failure, there would be no need to act again.

Progress in thought or action is thus dependent on dissatisfaction with the present. This dissatisfaction is the result of reflection on past choices, and the discovery of the ideal implicit in them. Our conception of the ideal, we have seen, is relative to our present achievement—a voluptuary and a saint conceive it differently. To some the ideal presents itself as pleasure, to others as utility; but it is at the bar of reason that these varying conceptions are judged, and rationality is thus the final court of appeal for actions as well as thoughts. Nor need this surprise us since we have seen that to condemn a man's course of action as bad imposes on us the duty of showing that the thought that led to it was unreasonable. It is rationality which must decide on what occasions the choice of pleasure or utility can be justified, and the good life is the one which is conscious of making its choices in the light of reason. Hence "be reasonable" is a moral imperative; and "be a man" is the same imperative re-worded, since, as we have seen, reason is the nature of man, and it is the reasonableness of men's actions which differentiates them from everything else in the universe. To accept such imperatives as moral, however, is to examine our lives and those of others in the light of reason, and to do this will save our moral judgments from subjectivity. For we shall claim reasonableness for them and so be prepared to submit them to reasoned criticism. In this way we shall agree with the objectivist that there is something objective or universal about morality, but, by insisting that,

when reasons are advanced in favour of anyone's course of action, it is we ourselves who are to be judges of their cogency, we shall do justice to the claims of the subjectivist also.

This study of action and what it implies may be summed up as follows: To act is to choose reflectively; to reflect is to have reasons for acting; to have a reason for acting is to aim at achieving something by acting. We could have no such aim if we did not feel some dissatisfaction with our present condition. It is this dissatisfaction which compels us to exercise initiative and create some new state of affairs which will better express the ideal revealed to us as we reflect on our past choices. This ideal is nothing but the rational or self-conscious nature of man. The more creatively rational a man's aims are the nearer he approaches to the ideal implicit within himself, and the more understanding he gains of its character. The existence of such an ideal or standard of preference is thus revealed to us as we reflect on the nature of choice and study our own actions and those of others; it is revealed, that is to say, in the study of moral philosophy. A philosophical study cannot stop short, however, with the discovery of an ideal guiding our action; it must go on to criticize it and so to deny or affirm it; and, whether we deny or affirm, we shall be forced, the more reflectively we act, to frame our objectives and make out choices accordingly. Just as to discover a valid way of reasoning affects our actual thinking because we at once think in accordance with it, so the acceptance or rejection of an ideal of conduct similarly and necessarily affects our practice. Therefore, although the philosophical study of action, as a part of philosophy, aims at elucidation, not edification, it cannot elucidate without incidentally but directly influencing what we do, and it is for this reason that it was implied at the outset that ethics could give guidance in a conflicting world; for Aristotle was not so far wide of the mark as has sometimes been supposed when he said that the object of ethics was practical, to make men good, and so to make them happy.

REFLECTIONS ON PLATO'S *REPUBLIC*

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In his greatest work (*The Republic*) the greatest thinker of his era, if not of all time, Plato, writing in one of the greatest, if not even the greatest epoch in the intellectual, artistic, and literary history of mankind, held up a mirror not only to his own age but to every age, not least our own, in the glowing radiance of his unsurpassed genius. This essay is an attempt to look on the world around us with his searchlight. Addressing on this subject a select company of educated and intelligent men and women, I discovered that several of them had attempted but had failed to read through *The Republic*. They could not see the wood for the trees, lost their way, and gave up the quest. Re-reading the book this summer holiday (my first acquaintance with it was made nearly half a century ago), I could understand their difficulty, although I did not allow myself to share their defeat. I am not attempting the ambitious task of expounding the argument, or interpreting the philosophy, but keenly aware of, and alive to the world in which we live to-day, its difficulties and dangers, problems and challenges, I offer some reflections on Plato's writing which the renewed study in preparation for the address referred to has brought. I am emboldened to do so by the plea of the President of the Institute that philosophical principles should be shown in practical application. It should have not only wings to soar in the rarefied air of abstract speculation, but feet to step firmly on the solid soil of concrete actuality. The word *philosophia* itself shows that its purpose is not the pursuit of truth for the sake of knowledge only, but also its capture for the guidance of life.

The writing of the book covered nearly twenty years of the philosopher's life, during which he had painful disappointments in his outer experience of the world around, but rewarding developments in the inner world of his own mind; the comparison of the later with the earlier books shows a movement from concern about politics to interest in philosophy; is it rash to suggest that the disciple of Socrates advances to become the original, independent master? The tone may become more despondent but the conviction grows more sure. Just as Isaiah of Jerusalem, disappointed in his hero, Uzziah the king, turned to God, and had the vision which made him a prophet (Chapter VI), so Plato turned from temporal facts to eternal truths and became a philosopher, whose thought detached itself more and more from the earth of imperfect images, and

attached itself to the perfect ideas. As prophet Isaiah continued to influence the policy of his land; as philosopher Plato held aloof from politics. He was not what, according to the late Lord Rosebery, Oliver Cromwell was, "a practical mystic," with, as a Scottish trade sign ran, "home above, business below." This my understanding of Plato, which I trust is not mistaken, suggests two reflections in relation to our own age. It has been an age of danger, difficulty, and disappointment. The existing order of society is not "delivering the goods," prosperity at home and security abroad; and disillusionized by facts men are searching for the truths that can guide and guard life, a view of the world and a standard of life which will end the present distress. Personally I hold that Christianity in its modern interpretation and application can offer both; but this is not the place to justify this belief. I do not know any philosophy that will "foot the bill," this big cheque drawn on the bank of speculative thought. Communism on the one hand and fascism on the other offer solutions of the problem. The one advocating violent revolution, and the other violent defence of the *status quo*, "the god of the things that are." Both require dictatorships, whether of the proletariat or of the Führer or Duce. Both are irrational *myths* which it should be the task of philosophy by a searching scrutiny to expose in their unreason. But reason must not be critical only, it must be constructive also, as Plato sought to be. While I am convinced religion alone can afford the constraining motive, philosophy may supply the guiding plan. We must with Plato continue to believe that there is discoverable a world-view which is true, and a standard of life which is right unless man's history is a tale

> Told by an idiot, full of sound and fury
> Signifying nothing. (*Macbeth*, Act V, Scene 5.)

For such a discovery of what the world means and life ought to be is a primary condition of the recovery of our age from its present sickness. Here I must content myself with the conviction, without any further attempt to prove *that* it can be done by showing *how*. Plato's philosophy does not seem to have had any influence on politics, and indeed one must candidly confess that it is impossible to see how his truth would work. He was the mystic, but not the practical mystic.

My second reflection, then, is that we must steer the bark of our *practical mysticism* between the Scylla of the *doctrinaire* and the Charybdis of the *opportunist*. If we are to "hitch our wagon to a star" we must not be star-gazers only, or wagon-drivers only, for the star must be such that a wagon can be hitched to it, and the wagon such that it can be hitched to a star. Although the word *compromise* has a suspicious sound, yet in the application of principle

to practice it is not merely a painful necessity to be deplored, but a condition of individual development or social progress which must be frankly accepted. From Plato's contrast of *ideas* and *images* we must advance to Aristotle concord of *form* and *matter*. His dualism of desires and intelligence must be transcended in the recognition of the unity of personality, or, to adapt his figure of speech, the steeds of desire and the charioteer of reason may be brought into accord. Modern psychology recognizes the possibility of *sublimation* as well as the actuality of *rationalization*. I must now qualify the concession I made in speaking of his truth. What does not work is not *true* at least for the time and the place. Abstractly true it may be concretely false; the application of the principle might in its failure bring into discredit the principle. Lest I should be drawn into a discussion of a side issue, I shall not here confess whether in my judgment pacifism is, or is not, an instance of this distinction. If I may be pardoned a personal reference, I have in my book *Can Christ Save Society?* drawn a distinction between the Christian Ideal and the Christian Conscience. The one sets the goal, the other marks the course to it; the one defines the ultimate purpose, the other prescribes the immediate duty; the one is interested in the strategy, the other is concerned about the tactics of the moral and religious campaign in human history. It will be admitted that to-day we have few philosophers who are practical politicians and still fewer politicians who are competent philosophers. If the combination were more frequent, Plato's idea of the philosopher as ruler would not seem so absurd, as to most people it seems to be; and wisdom would be justified by her works.

We must, however, recognize that under existing imperfect conditions, there must always be some measure of compromise between the ideal and the actual; the moralist will insist that there will be the maximum *practicable* application of the principle, the opportunist will be too readily content with the *minimum* imperative application, and the *doctrinaire* will insist on the maximum conceivable, whether practicable or not. If I may venture on an instance of the opportunist policy: the National Government professes its ardent devotion to the League of Nations and its principle of collective security, but to many prudent observers they seem to show a preference for the *minimum* rather than the *maximum* practicable application. The history of the past seems, however, to justify vision and courage even in politics. Is it not now generally recognized that the pro-Boers were right, that the grant of self-government in South Africa has been justified, that the delay in granting Home Rule to Ireland and the consequent continual repressions have sown seeds of hate of which the harvest is being still reaped, that the Treaty just signed with Egypt might have

been concluded at an earlier date with mutual advantage? Wisdom after the event, however, is not heroic, and often proves costly. We still need the inspiration of Plato's idealism.

The opportunist may be quite honest in his intentions, and nevertheless he may be "rationalizing" his motives; he may lack the self-knowledge which would disclose to him that he was giving respectable reasons for disreputable courses. Plato's description of the deterioration in forms of government leads me to other reflections. The deterioration does not necessarily take place in such successive stages, as are described; timocracy, oligarchy (or plutocracy), democracy, despotism, need not follow one another, but may be tendencies and influences in a State which could not be simply described by any of these terms. There never has been, and there is never likely to be, a Government which could claim the proud title of an aristocracy in Plato's sense, although there have been, and may still more be, approaches to it. In many lands of Europe the lowest stage of despotism has been reached, and that has its ideology, which has its ardent advocates and passionate devotees. An attempt may be made to sketch this rationalization. The supreme value is the notion: unity, security, prosperity are essential to the realization of that value; democracy has failed to secure these; dictatorship promises to achieve them, for only thus can the unity, on which security and prosperity depend, be guaranteed; one race, one State, one party, one policy, one leader are essential to the fulfilment by the nation of its destiny; this is the idea which has captured the mind of Germany in so far as it is vocal. The State is, and must be, "totalitarian," in claiming authority (whether it exercises it in all spheres or not is a matter of expediency and not principle) in the total life, work, and so far as can be, even the thought of the people. In this country democracy has not so completely failed as to make this reaction to despotism an immediate danger, and all political parties are still professing their belief in and fidelity to it; but there are some ominous signs that attempts to make revolutionary changes by force would meet resistance by force. "The inevitableness of gradualness" must be recognized, if disaster is to be averted. Such caution does not, however, mean contentment, or acquiescence in things as they are. The motives which, according to Plato, lead to such deterioration are present and patent in our legislation and administration. There are ambitious politicians (timocrats) who are moved not by the unmixed motive of devotion to the common good, but covet honours and power; and their exclusion from office leads them to mischievous activities. The reader will not need any vivid imagination to present to himself several persons now conspicuous in public life. When an Honours List is published, when a Cabinet is being formed or reconstructed, when

an election is being held, timocracy can be detected by the keen eye "naked and unashamed," or only with the fig-leaf. A man may covet honour or power, and may nevertheless use his elevation wisely and well; and thus timocracy is not the most sinister form of political deterioration. Much more dangerous and harmful is the influence of avarice, the greed for wealth, and in that greed many desires are blended, a craving for luxury and ostentation, an ambition for the honour or the power wealth can purchase. There are the idle rich, but they are less of a political danger than the busy rich—the masters of finance, industry, and commerce, whose trade or business or profession is their politics, who use the resources under their command to influence legislation and administration in their own private interests. "Protection" affords a golden opportunity for intrigue; a lower tariff on their "raw materials," a higher tariff on their "finished goods" not for the public benefit but for their private profit is their object in their interventions in politics. Opposition, open or disguised, to the passing or the carrying out of laws which afford safe and healthy conditions for labour, is regarded as legitimate, for "business is business." The gross misrepresentation of the aims and ways of the Labour Party are the foul weapons used in the warfare of the classes against the masses. I have not joined the Labour Party, but such motives and such methods demand condemnation as a danger to the State.

That Plato's unhappy experiences of popular government in Athens led him to place democracy lower than plutocracy or timocracy neither condemns nor commends his judgment. So far men have found that every form of government has its defects; but as anarchy would be still worse, we must ask ourselves which is likely to have fewest defects. "Government of the people for the people by the people" as a definition of democracy is an ideal, but has never been an actuality; and yet it is an ideal as none of the other forms of government is, and if we can educate our masters, morally as well as intellectually, it might even approach the ideal of an aristocracy. At least, in view of what the English people is, we need not abandon the hope of an education which would lead the masses to choose from among themselves or even the classes leaders, fit and worthy, and to follow their leading. But that democracy has failed in other lands, although it is the interest of dictators to exaggerate that failure, must be admitted. Partisanship has been the weakness and the undoing of democracy. Individual and class interests have been so asserted as to divide. The Labour Party, even if it is concerned with the welfare of the great majority of the nation, is a "class" party, and some of its adherents are unreasonable partisans. This division is being recognized as a hindrance to giving effect to what the greater part of the nation wants. It is not only intellectual defect, but also

moral perversity which makes partisans; and it is only education in the widest sense, not of a class as Plato advocated, but of the people as a whole which can change democracy from a peril to a promise.

The restriction of the education to a class is one of the limitations in which Plato—great as he was, a heritage of all ages and not only a treasure for one—shows that even genius cannot transcend its contemporary environment altogether. His acceptance of war and of slavery must also be recognized as defects of his vision. Islam has included slavery in the social order, for which the Koran prescribes regulations. Christianity did not at first condemn the institution of slavery, but it proclaimed a conception of the relation of God to man, of the value of man, and of the obligations of man to man, which was implicitly its condemnation. Slavery, such as was at the economic basis of Greek society, has no present interest for us, except as an obligation to secure its suppression wherever it still survives. But we must confess that, apart from certain modifying influences, modern capitalism with the dominance of capital and the dependence of labour, has involved a wage-slavery the acquiescence in which may be censured as a defect in vision of what a society should be. Although Plato in his description of the formation of the community gives primary place to the supply by human labour of physical necessities, yet he assigns to toilers and traders an inferior position; and he seems to cherish the same prejudice against this class as a constituent in the community as he has against the desires as elements in human personality. His segregation of classes is not a rigid caste system, as he allows a promising child of the lowest class to pass to the higher, and to be educated for functions there. In modern communism it is the proletariat that is exalted and the *bourgeoisie* which is abused. A class warfare is to be waged with a view to a classless society. Apart from that extreme, political thought to-day is bound to appreciate the importance of economic activities, and cannot assign an inferior position to those who are so engaged. I have already referred to the political danger of the illegitimate influence of private economic interests in public policy; but that adequate consideration must be given to the regulation of these economic activities in the interests of the community is one of the most urgent of the tasks laid on the State. Man does not live by bread alone, but he must have bread to live. That much legislation and administration must be concerned with the bread question needs no detailed illustration: it is so patent to all. What Plato seems to have ignored, and what some political theories to-day are inclined not to recognize adequately, is that not the classes only, but the masses also, must not only be enabled to live, but also to live well, and to live well they must have more than bread. For the

auxiliaries, and much more fully for the guardians Plato recognizes the need of education, the development of body and soul for their respective functions. In the earlier books individual education seems to be subordinated to social functions, but in the later books that subordination falls into the background, and what is contemplated is not only a citizen in time, but a denizen of eternity. What must be included in any social ideal whatever is not only the subjugation of nature to supply human necessities and the regulation of social relations, but also the development of human personality as having an intrinsic value, and not only in social relations. We have compulsory general education; but still the error lingers that this education may retain a class character, and may be determined by social position or prospects. The opposition to the raising of the school age to fifteen, the tardiness in reconstruction in accordance with the Haddow Report, the exemption allowed where beneficial employment can be offered as an excuse from continued attendance at school—all indicate that we have not yet got beyond Plato's limitation. *Civilization* in adequate provision for the material necessities and even comforts of the entire population, *culture* for the most appropriate development of human personality available for all according to capacity, and *community* or such effective regulation of social relations as will approach as nearly as possible to a harmonious unity, in which all will be for each and each for all—that seems to me the ideal which modern political philosophy must formulate in the spirit of Plato.

In his exposition Plato has a city with its necessary and dependent country around it in view, not a nation, still less an empire. But he does recognize a wider community among Greeks so far as to distinguish between them and "barbarians." He regards war among them as civil war; it is στάσις and not πολέμος, and the victors must not enslave the vanquished, burn their houses, nor waste their fields. This is a limitation which fact, sentiment, conviction must set aside. The racialism of the National Socialist Party in Germany is an anachronism, and so, under the impartial scrutiny of a rational and ethical philosophy, must appear all exclusive and intolerant nationalisms. Stoicism advanced beyond Plato in recognizing the spermatic reason in all men, and Roman jurisprudence in its acceptance of a *jus gentium*. Philosophers have had visions of a universal peace and a solidarity of the human race. And the world danger to-day seems to offer the alternative: Do this, or perish! Any philosophy prostitutes itself when it offers itself as a rationalization of racialism or nationalism.

Plato assumes that auxiliaries and guardians so trained will be sufficient and efficient for the defence and the direction of the State; but in our more complex modern society, with its increasing differen-

tiation of functions, there seems to be a need for a distinction of organs; and Rudolf Steiner has advocated a *threefold State*, an organ for each of its functions, economic, cultural, and political. It is certain that not every man in Parliament, and not even every member of the Cabinet (if any), has been by his education equipped for competent dealing with all the problems with which the State is to-day called to deal. But against a complete segregation of functions thus proposed two objections held. The interests and activities in the three spheres mentioned can be distinguished, but not separated. Oneness is necessary to man's wholeness. The defect of some economic specialists is that they have had before them the abstraction of the economic man, whose sole end of existence was to produce or to consume wealth, and other essentials of his personality have been neglected. That some vocational training may have a place in education as well as general culture needs to be acknowledged. All industry and commerce cannot be regulated by the State to the exclusion of individual enterprise, and the less the State seeks to control culture and leave it freedom the better. But integration must accompany differentiation if confusion and conflict are to be avoided. However desirable may be Advisory Councils, composed of specialists and experts, there must be a central authority to co-ordinate the different functions, and rulers must be, for reasons already shown, if possible, a combination of philosopher and man of affairs.

The growing despondency of Plato, his flight from temporal actuality to eternal ideal, shows pessimism and not optimism; deterioration seems man's doom rather than progress his destiny. Spengler has advanced the theory that Advance and Decline is the law for every civilization or culture. Niebuhr accepts the dualism of moral man and immoral society. Many voices are heard warning us that the next war will be the end of our civilization. Certainly an unqualified optimism is as unreasonable as an unmitigated pessimism. The world situation is full of danger, distress, and disappointment. But may not the wider vision of philosophy give renewed courage? Without committing ourselves to the Hegelian extravagance that the real is all and always the rational, that sin is the antithesis between the thesis of innocence and the synthesis of virtue, that mankind's fall is a fall upwards, reason as well as faith bid us hope that the age-long, world-wide toil and travail of mankind will not end in tragedy but that mankind's sacrifice will yet bring salvation. But only if men will eschew folly and follow wisdom, and may not philosophy as a world-view and standard of life make some contribution to the deliverance and the triumph?

PHILOSOPHY, SCIENCE, AND VALUE

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The first part of this article deals with two questions[1] raised by Professor Muirhead in his interesting review of the volume *What Can Philosophy Determine?*

In my answers I shall be presupposing certain views which Professor Muirhead probably does not accept; and this applies particularly to my answer to his second question. To explain what these views are I have written the second and third parts of the article.

Both the present replies and also the position I adopted in the symposium to which his questions refer, are influenced by the fact that, recently, I have been trying to clarify my own ideas about the function of philosophy and of moral philosophy particularly. It is possible that, owing to this preoccupation with a related subject, I approached the subject of the symposium in a somewhat confused state of mind; and that sometimes, when I was talking about the relation of philosophy to value, I was really thinking about the relation of moral philosophy to practical moral judgments of right and wrong.

Perhaps, therefore, the second and third parts of this article, dealing with philosophy and moral philosophy respectively, will not be considered out of place. The views I express are, of course, tentative; and I should be extremely interested to know how far others agree with or differ from them. If it were possible to reach conceptions of philosophy and ethics which would be generally accepted—a vain hope, perhaps!—that would provide one step at least towards answering the question, "Can philosophy determine what is ethically or socially valuable?"

I

(1) Professor Muirhead's first question refers to the view I held as to the nature of value judgments. I will not attempt any defence. I spoke as though a "valuation" were a state of mind or "attitude" which could be quite devoid of cognitive character and theoretical implication. Whatever may be the difference between "value-judgments" and other types of judgment, I now see that a criticism of my paper by Mr. Stout is sound—the criticism that what I said about valuations cannot be true if (as I also maintained towards

[1] *Philosophy*, vol. xii, No. 45, p. 117.

the end of my paper) theoretical opinions can influence and change valuations. Such influence can be exerted only in so far as valuations have a theoretical reference or implication.

The view I am now abandoning to its fate was given an important place in my argument, and I am not at all sure how much of the general argument falls with it. But I shall not go into that question now.

A more moderate position I adopted in Section III[1] of my paper seems reasonable. Any belief, statement, or judgment, it was said, may be considered in either of two ways—either as a *theoretical assertion* or as a *fact*. I should say, therefore, that however much valuations may have theoretical references, valuations may also be considered as facts to be explained; and the question whether philosophy is competent to determine what is ethically or socially valuable cannot be answered until we know what the primary function of philosophy is. Is philosophy primarily concerned with valuations as theoretical assertions, or is it primarily concerned with them as facts? That is to say, Is philosophy mainly interested in discovering what *is*—in general or in particular—good and right; or is it mainly interested in discovering how and why men judge that certain things are good and right? Quite clearly the main problem set for the symposium must remain obscure and indeterminate until we are agreed on the answers to the following questions: What is philosophy? How does it differ from science? What is the relation of philosophy to ethics or moral philosophy? What is the difference between a theoretical study and a practical art?

(2) Professor Muirhead's second question only confirms my suspicion that no advance is possible until we tackle some of these preliminary questions. He asks[2] whether the argument that "because philosophy is itself theoretical it can only deal with theory" does not rest on a play of words like the statement "the driver of fat oxen should be fat." Actually I do not hold that philosophy deals with theory because it is theoretical. Science is a theoretical inquiry; but I do not hold that it is concerned with theory in the sense in which philosophy is. The contents of scientific study are empirical facts, and the business of science is to formulate theories which will render those facts intelligible. On the other hand, the contents of philosophical study are the theories formulated by the sciences, together with the general beliefs, faiths, and speculations of humanity in general; and the business of philosophy is to bring those theories and beliefs into relation, and to see that fundamental inconsistencies in men's views of the universe are overcome.

I proceed now to develop this conception of the nature and function of philosophy.

[1] *What Can Philosophy Determine?* pp. 220–1. [2] Page 117.

II

The Nature of Philosophy. Professor Muirhead[1] suggests that the contemporary "desire to evacuate philosophy of much of its traditional contents" may be due to a spirit of defeatism. Personally, if I conceive the scope of philosophy to be more restricted than did the Idealists, I am inclined to attribute this, not to a spirit of defeatism, but to an optimistic belief in the co-operative character of the many activities in which the human mind engages. I believe that philosophy does help us to understand reality, but I do not think that this is a distinctive mark of "philosophy" as opposed to "history" and "science." Many Idealists speak as though they believe that, while philosophy is the search for "ultimate truth" and the apprehension of "Reality," science can discover only some kind of inferior "partial truth" about "appearances." Whether the difference between the view of Idealists and the view I present is very profound remains to be seen; but it seems to me that they do not—or, at any rate, did not in the past—take a sufficiently appreciative view of science, and that they are apt to make claims for philosophy which imply that it is a sort of lonely Elijah amongst the prophets of Baal. Elijah's extreme pessimism, said the Lord, was hardly warranted by the facts of the case.

I believe that the knowledge of reality is the aim of all intellectual activity, and that the various branches of research and inquiry co-operate in pursuit of this end. Philosophy, science, history, etc., each performs a certain function in this joint enterprise.

What is the function of philosophy? I think that the simplest way of answering this question is to look at the matter, in the first place, historically.

Originally, history, philosophy, and science were not distinguished from each other as they are at present. The further we go back in human history the more do we find them merging into each other. For primitive man, e.g., historical and scientific and philosophical explanation tended to be much the same thing. Questions about the "nature" and "essence" of things were not clearly distinguished from questions about "origin." "Explanation" was to a great extent made up of myth and fable—this constituting a great part of the philosophy of our ancient ancestors.

Again, if we take science as we know it to-day—or rather the collection of the sciences—and trace these back to their origins, we find that each science has developed out of what was originally part of the content of "philosophy."

I ought to say that the generalizations contained in the last two paragraphs are made without my having undertaken any very

[1] Page 116.

exhaustive study of the subject. I think they are true, but leave the experts to decide.

If they *are* true, then they show that philosophy was, in the earliest ages, *the* search for ultimate truth, *the* study of Reality. This does not mean that history and science were doing something else. There was no history or science other than the embryonic history and science contained in philosophy itself. Philosophy was thus, originally, the search after knowledge or truth in its entirety.

As experience and knowledge expanded, however, it was found that, in the treatment of any group of related problems, a stage was reached when little further advance was possible until these problems were studied in relative isolation from others, and with a greater emphasis on research into relevant empirical facts. It is at this stage that science, as distinguished from philosophical thinking in general, emerges. Specialization begins and continually increases as civilization develops. Indeed, one important aspect of the history of philosophy itself is the history of the birth of successive sciences —mathematics, chemistry, physics, biology, and, quite recently, psychology and various social sciences. Nowadays we so naturally think of science and philosophy as two different things, working by different methods, that we are prone to forget that the distinction did not always exist.

Now, if all that I have said be true, one important inference to be drawn is that what might truly be said of philosophy in primitive and ancient times is no longer true at the present day. Philosophy *was the* search for ultimate truth; but now it is only one of the agencies working towards this end, having a special function in a co-operative enterprise. We can best see what philosophy to-day is by trying to make clear to ourselves the function it actually performs.

What function does it perform? In trying to answer this question, we must, I think, consider philosophy as it is practised by professional philosophers. No doubt there is a sense in which it is true that all men are philosophers. It is true that all men to some extent, and in a kind of unsystematic fashion, perform those mental operations which are characteristic of philosophizing. But it is also true that, in precisely the same sense, all men are scientists. We all, in an unsystematic way, use the methods of observation, inference, and experiment by which the scientist achieves his results. But if we are to draw any distinction between philosophy and science, then by philosophy and science we must understand the philosophy of philosophers and the science of scientists, strictly so-called; for, if we are to understand the essential difference between these two types of inquiry, we must take them as they are steadily pursued by those who make them their special business.

Now the first point to bear in mind is one which has already been mentioned—that philosophy was, but no longer is, the all-inclusive search for truth.

The second point I would make seems to follow from the first—the point that, when we subtract from the sum total of all intellectual investigation those inquiries which belong to particular sciences and to history, then what remains is the province of philosophy. Perhaps this is a crude way of arguing, and perhaps a great number of qualifications ought to be entered here; but I think that the general point is sound.

What, then, is left when all these special inquiries have been subtracted? There are, it seems to me, two important tasks left for philosophy.

In the *first* place, there remain all those problems which may in the future—one by one—become so well-defined that they can profitably be made subjects for relatively isolated study. That is, there are those problems which may some day become the contents of new sciences. There is the problem of the relation of body to mind; the question of personal survival after death of the body. There is the question of freedom. There are various questions relative to morality and religion, fundamental problems in epistemology—and so on. All these questions, or certain aspects of them, will sooner or later become so clearly capable of being separated from irrelevant issues, and certain fields of empirical fact will be so clearly relevant to our beliefs about these questions, that they can be separated off from general philosophical issues and be investigated by the appropriate scientific methods. But it is certain that, at the present day, we have not reached a stage at which this is possible. Concerning these matters we have "faiths," we speculate and we form beliefs on grounds which are not particularly clear even to ourselves. Some of us are content to accept answers to them on the mere authority of the "wise," or after the most superficial thought.

A most important function of philosophy is to keep alive speculation about these matters. The speculation is at best confused; but the more confused it is the more important is the task of keeping it going. It is essential that we should not sit down under "mysteries" or dogmatic "solutions" which cannot be reasonably defended. To do so would have two evil consequences. It would render impossible the acquiring of genuine knowledge about the particular matter in question. It would also hinder advance in knowledge on other matters as well. Whilst certain topics may be isolated for *relatively* separate treatment, this isolation can only be relative. Beliefs which we hold on one particular subject have implications which "slop over" into other subjects. Certain religious attitudes

and theological systems, e.g., tend to discourage progress in biological and anthropological studies.

In the *second* place there remains for philosophy the task of correlating the general conclusions reached by the separate sciences. This task is, in a way, simply a particular aspect of what I have described as philosophy's first function. The most straightforward, though not necessarily the easiest, part of philosophy's task in this respect is the thinking together of the results of specialized inquiries into a total point of view. The work of correlation is greatly complicated, however, by the fact that sometimes theories evolved by a number of different sciences simply will not fit together. The implications (or apparent implications) of a theory evolved by science A, which "slop over" into the province of science B, sometimes contradict the apparently well-founded theories evolved in science B itself. In such situations the work of the philosopher is dialectical —the "criticism of hypotheses." His business is to discover, so far as he can, just where the contradiction lies, and to insist upon a re-examination of the clashing theories. Someone has blundered somewhere; and, until that blunder is corrected, "reason is divided against itself" and hampered in its progress towards a coherent whole of knowledge.

The claim of philosophy to exercise this office of criticism of scientific theories is sometimes regarded by scientists as a piece of impertinence. Certainly it may be advanced in a form which implies that the philosopher can "put the scientists right"; and that, I think, is something which philosophy cannot do. On what grounds could the philosopher pretend to be able to "correct the conclusions of science"? Scientific theories are built up primarily to explain a certain range of facts; and a false theory can only be "corrected" in any *positive* sense by the expert who is familiar with these facts, i.e. by the scientist himself. The only kind of "correction" which the philosopher can do is to point out the contradictions which exist between the theories evolved by different sciences. His correction takes the form of negative criticism. He shows that the different theories contradict each other, and says that *therefore* one or other of them (possibly both) is mistaken. The positive correction—the remoulding of the theories and the positive resolution of the contradiction—can only be got by referring the matter back to the appropriate specialists, and asking them to do their jobs again a little more carefully.

From what has been said, we can gain some idea of the methods appropriate to philosophy. The methods of science are observation, construction of hypothesis, experimentation, and formulation of theory. For science the main test of a theory is empirical verification. Philosophy, on the other hand, takes as its material the theories of

scientists and the beliefs and faiths of ordinary men. It tries to think them together into a consistent world-view. The main question for it is not whether these theories and beliefs square with empirical fact, but whether they square with each other. Its test is the logical principle of non-contradiction. We cannot, of course, separate philosophy and science off from each other by a clear line of demarcation, any more than we can draw a sharp line between the province of one science and that of another. The difference is perhaps mainly one of approach. Science looks at its theories in their relation to empirical facts, and philosophy looks at those theories in their relations to each other.

I believe that this view of the nature and function of philosophy accords pretty well with the work which philosophers actually do perform. Certainly its function so conceived is limited—limited in a way similar to that of the "mission" of Socrates, perhaps. But if the philosopher recognizes that he is simply doing a particular piece of work in a co-operative enterprise, believing that other equally important tasks are being performed by other people, he can be quite as optimistic about the ultimate result as they can who hold the "Elijah" conception of philosophy's nature and function.

III

Moral Philosophy, or Ethics. Now where does moral philosophy or ethics fit into this scheme? Is it philosophy, or is it science, or is it something different from both? I believe that the discussion of ethical problems is carried on at present mainly by philosophical rather than by scientific methods; but I also think that we shall not get very much further in solving the problems of ethics until some at least of its problems are approached in a more scientific spirit. Moral philosophers do not, as a rule, concern themselves much with the extensive collection and discriminating study of the empirical facts about the behaviour and judgments of mankind. They spend most of their time studying and reflecting on what other moral philosophers have written. They tend to make broad generalizations about "morality" and the " ordinary moral consciousness," and to draw more or less logical inferences from these generalizations. They are much given to fraternal strife in defence of their speculative nostrums.

These remarks are not made in any cynical frame of mind. I believe that, at present, many of the major problems of ethics cannot be treated in any other way, owing to their nature and to their relations with those vague comprehensive beliefs and faiths which it is the business of philosophy to keep in the arena of disputation.

May the strife and the speculations of the moral philosophers continue, then!

At the same time, I think that there are at least *some* questions in ethics which could be approached in a more scientific spirit; and I believe that it would be very valuable if moral philosophers would now give considerably more attention to marking off and investigating those problems in ethics which are concerned with questions of fact. I am not pleading for anything revolutionary in the methods of ethical study. What I have in mind has been done to some extent by moralists in the past. I am only suggesting that a stage has been reached when it is this side of the moralist's work which must be done far more adequately if we are to get anywhere at all.

Perhaps a single example will serve to bring out my meaning. I have suggested that moralists might mark off and investigate more fully those ethical questions which deal with matters of fact. Take, for instance, that generalization with which Kant begins the first section of the *Grundlegung:* "Nothing . . . can be called good without qualification, except a good will." He proposes to elucidate the principles involved in the common notions of morality, and he takes this generalization to be a most essential part of the "common rational knowledge of morality." It is, for him, a basic *fact* that this statement represents what all ordinary decent moral persons believe. T. H. Green follows Kant in holding that, as a matter of plain fact, this is a deliverance of the "ordinary moral consciousness." Now, when so much—so much indeed that is criticized—in the moral theories of Kant and Green is traceable to their acceptance of this initial assumption, would it not be of real use if moralists would make a proper attempt to assess the evidence for this view of Kant and Green? The question is purely one of fact, and is capable of being answered with a "yes" or "no," if moralists will undertake the labour of an empirical investigation, and decide according to the evidence available.

If we were to make a survey of all the problems commonly dealt with in moral philosophy; and, after deciding which ones demand for their solution some answers relating to matters of fact; if we were to adopt the proper scientific and historical methods for dealing with these factual questions; there is no predicting the amount of benefit which might accrue to ethical studies. Green himself, in spite of his suspicions of empiricism, was alive to some of the advantages of historical and sociological studies, as a test for the truth of ethical theory, as is shown in his chapter[1] on the Greek and Modern ideas of Virtue. Writers such as Hobhouse and John Dewey, and other moralists in America, have seen this even more clearly.

[1] *Prolegomena,* Bk. III, chap. v.

It may, of course, be said that, interesting as such historical and anthropological studies may be, they are not moral philosophy. The moral philosopher's business (it may be asserted) is not to discover what men suppose, or have in the past supposed, to be right, but to show what they *ought* to think right, or what *is* right.

This raises the question as to moral philosophy's function. Moral philosophy is, in the long run, I believe, an aid to us in making up our minds about what is right or wrong. But while it may be of practical help in this way, its particular function is not to make moral judgments, but to render moral judgments intelligible. Mathematics, if we are to be guided in our view of mathematics by Professor L. Hogben, arose out of the practical needs of ancient builders, sailors, and craftsmen. But there is a difference between the study of mathematics and the building of temples or navigation of ships—the difference between a theoretical study and a practical art. An analogous distinction must, I think, be drawn between the study of moral philosophy on the one hand, and practical moral judging or evaluation on the other. Moral philosophy arises out of a practical need. Moral philosophy is the reflection on moral judgments and moral standards—a reflection forced upon us by the curious implications of some of our judgments respecting right and wrong. But while this reflection does, in the long run, help to determine what our future judgments will be—just as the study of mathematics and other "pure sciences" will make a difference to the way in which we build temples and bridges—its particular function is not to make these judgments, but to help us to understand the nature and implications of the judgments which men have made or do make. And if this be the function of moral philosophy, I do not understand how it can do anything other than deal with what men have actually thought, and do actually think, good and right.

I am not prepared to follow Dr. Ross in holding, as he apparently[1] does, that the human mind "has in fact an *a priori* insight into certain broad principles of morality"—that we do not merely think, but really *know* something about moral questions, to the extent of being able to say (concerning these broad principles) that what we *think* to be "so" really *is* "so." I do not feel quite easy about such a doctrine; but I do agree with Dr. Ross[2] that, so far as the function of moral philosophy is concerned, its business is not to prove or disprove the "main moral convictions of mankind" (I should be inclined to omit the word "main"), but to accept them as a starting-point. Unless I misunderstand them, Kant and Green would concur in this.

No doubt many who accept this general statement with respect to the function of moral philosophy would still hold that, neverthe-

[1] *The Right and the Good*, p. 14. [2] *Ibid.*, pp. 21 note, and 39–41.

less, moral philosophy must proceed to make moral evaluations. They would hold that the "main moral convictions of plain men" are to be regarded, not as *facts* or *data*, but as "*a priori* knowledge," or "axioms" or "self-evident truths," or something of the kind—as something from which true inferences as to what is right or good or our duty may be drawn by moral philosophy. That is, moral philosophy would deduce further truths *following* from these main convictions, not merely truths *about* them. In my view, on the contrary, moral philosophy should regard these convictions as empirical facts—the material which is to be explained. Even the criteria or standards which the moral philosopher finds implicitly or explicitly governing these judgments are, for him, not subjects of valuational assessment, but are rather fields for further study. For example, if he finds that a certain class of judgments implies a hedonistic criterion, and that certain other judgments imply "personal perfection" as the criterion, it is not the business of the moral philosopher to ask himself: "Now, which of these criteria *ought* we to use—which is the higher or more adequate?" His function is to discover, if he can, the environing conditions which influence the use of one criterion rather than another.

In the process of this inquiry he will, no doubt, bring to light many significant facts; and the results of his investigations may (I am confident that they will) indeed influence humanity towards retaining or abandoning certain standards and modes of judgment. Research might show that various conceptions of the moral standard tend to displace one another in a significant order according as certain non-moral qualities of character and economic conditions develop and change. I do not say that research *will* show this. I only say that this is a possibility. But, whatever such investigation may show, I believe that it will have repercussions on men's practical moral attitude. It may, as Dr. Ross suggests[1], weaken what were hitherto moral convictions, and give rise to others. But the moral philosopher is concerned neither to strengthen nor to weaken these convictions. He is not concerned to say "This is the standard you ought to use"; or "This is what you ought to think good or right"; but rather to show how your use of this standard, or your thinking this particular type of action good, is related to other facts about your life and social and material environment.

This, I say, is the view I hold about the nature and function of ethics. It may not find very general acceptance, and I should welcome criticism of it. But there are at least some philosophers who hold that ethics should begin by accepting, as its starting-point, the "main convictions of the plain man," and that ethical theory has to fit itself to them, and not them to itself. Is it not evident that all

[1] *The Right and the Good*, pp. 13–14.

who hold such a view—whether they regard these moral convictions as "*a priori* knowledge" or as "factual data"—must assume that there are in fact certain "main convictions of the plain man," and must assume also that they know what the plain man's convictions are? Is there not also a pressing need for us to make sure that what we call the views of the plain man are not merely personal convictions shared by a relatively small class of persons. We simply cannot make sure on this point by even the most exhaustive interrogation of our own individual minds. We must go to the trouble of making inquiries. We must adopt empirical methods of inquiry, and collect evidence before we make generalizations about what are and what are not convictions of the plain man. It is this aspect of ethical studies which I am suggesting must be done much more systematically, and to which much more attention should be given at the present day. There are, I say, some very important matters of fact about which moral philosophers make large assumptions, and, wherever possible, ethical theory should be founded on something much more solid than assumptions.

[NOTE.—This paper had been completed before Professor Stace's article on "The Place of Philosophy in Human Culture" appeared in the July issue of *Philosophy*. My view of philosophy corresponds fairly closely to what Professor Stace calls the "trunk and branch view"; and his principal ground for rejecting this conception is that he believes philosophy to have a special content which distinguishes it from all other subjects, and which can never become the subject-matter of any particular science or sciences.

While lengthy comments would be out of place in this short note, I may say that I do not find what Professor Stace has said convincing. For instance, most of his "fundamental and ultimate philosophical questions" which concern morals (p. 308) are, in my view, most appropriate subjects for scientific and historical inquiry; and I fail to see how *any* question about what *is* (as distinguished from what *ought* to be) can be eternally excluded from the provinces of science and history. Again, granting that science and history are not competent to pronounce on what *ought* to be, is not Professor Stace assuming without adequate discussion, that philosophy is so competent?]

COLOUR

H. WALLIS CHAPMAN

WHENEVER we read any philosophical work dealing with the nature of qualities, the status of universals, or similar problems, we find continual references to colour; redness and blueness meet us on every page. Even Whitehead, whose obscurity is, at least in part, due to his avoidance of particular instances, condescends to cite colours as examples of "eternal objects" and other cases will occur at once to every reader.

The reason of this is clear, colours are the only sensible qualities which have definite and independent names. There are descriptive adjectives enough for sounds, but the only definite names are those of the notes of the scale, which are clearly inadequate; such words as "roar," "shriek," "howl," have nothing like the definiteness of "red" or "yellow"; such definiteness as they do possess is largely owing to their expressive and emotional associations, and we shall see later that that is what might be expected. The nomenclature of tastes and smells is rudimentary. Names of shapes are largely geometrical, not sensible. The names of the tactile sensations are more definite, but they are not independent as the names of colours are, they simply denote the degree and direction of the resistance offered by the surface touched; you can say that "hard" means "difficult to thrust the fingers into" and "sticky" means "difficult to withdraw the fingers from," but you can frame no similar definitions for "red" and "blue."

It would seem, therefore, that something may be learnt by a careful analysis of our experience of colour and the manner in which we use words relating thereto. I am not going to criticize any of the current physiological theories of colour, whether three-colour or four-colour, but the fact that such theories are possible is important; its significance will appear later.

I will begin by considering what we mean by the colour of an object; it is often urged that this cannot be a property of the object, as it varies with the illumination. For example, a rosy face seen by a sodium flame appears yellowish-grey. This shows that we must distinguish between the colour of an object and that seen on some particular occasion when the object is viewed, but it does not follow that there is no property of the object which may be called its colour.

Furthermore, even when the object and the illumination are the

same the colours seen by different observers may differ; the strongest instance is colour-blindness, when one man says that a thing is brown and another that it is green, but minor differences are common; disagreements about slight shades will occur to anyone's recollection. This argument raises two questions, which must be carefully distinguished. When A says "This is green and that is brown" and B says "No, they are both green," there is clearly a difference somewhere and we can inquire into the cause of that difference; but can we also ask, "Is A's perception in pronouncing a thing green like B's in pronouncing the same thing green?" or has such a question no meaning? For the present we will confine ourselves to the former of these problems. In such a case we have no direct evidence of a difference in the physical situations in the two cases, such as we have when a change in the illumination alters the apparent colour of an object; we know of no difference in organization between the eyes of a colour-blind man and those of a normal man. Still it seems reasonable to suppose that there is a difference and that it may be discovered some day. Moreover, certain drugs will induce differences of perception of the same type, and the administration of the drug is certainly a physical event. We can therefore say that, although we cannot prove that differences of perception of this sort result from differences in the physical situation, there is a strong presumption that they do so and no evidence to the contrary.

It appears therefore that the colour perceived on any particular occasion is a function of the whole physical situation including the object perceived, the illumination, the medium, and the physical condition of the percipient, but not that it is mental in any sense in which any thing perceived is not mental. The staunchest Berkeleyan must admit that the distinction corresponds to a real difference, although he holds the ordinary ideas on the subject to be inadequate and erroneous.

If, however, the colour perceived is a function of the whole situation, what is the colour of the object? We cannot say that so much of the perception is due to the object and so much to the rest of the situation, and, if we cannot, it seems that we might say that the situation has colour, but not the object. Yet "the grass is green" certainly means something, and I will try to explain what.

But before I do so there is another question to be considered. If we cannot point out any difference between the normal and the colour-blind eye, by what right do we call one normal and the other colour-blind? Is it a mere matter of counting heads? This is an unsatisfactory way of dealing with any philosophical question.

An answer may be based on what has been called "the principle of maximum discrimination." When two men are given wools to sort as a test of colour-blindness, one will separate them into a number of sets, but the other may subdivide some of these sets, distinguishing wools which the first has confounded. Similarly things which in ordinary daylight are distinguished as red and black may be confounded by the light of a sodium flame, or in the first grey of the morning. In each case the normal vision or illumination distinguishes colours which the other confounds. Of two observers the one who can see all that the other does and more also may fairly claim a superiority either in organization or in environment. We thus obtain a test of a normal vision or a good light free from subjective taint. The more distinctions are revealed the better is the sight or the light as the case may be.

There is, however, a difficulty. If the colour distinctions seen by one man or through one medium always included, or were included in, those seen by or through another, our principle would, theoretically, solve all questions. But this is not the case: a normal man may say, at least at first sight, that two objects are the same shade of pink, when a colour-blind man readily distinguishes them as different shades of blue; a piece of glass which confuses the colours of a landscape will distinguish a flame containing sodium and potassium from one containing sodium only. In such cases our criterion of normality seems to fail. We can, however, say that we are right when we assert a distinction, wrong when we deny it, and that the normal sight is only the one which perceives most distinctions, and thus approaches most closely to an imaginary super-observer who combines all distinctions. The physicist may here say, "There is no need for such an imaginary super-observer, we have a real one in the spectroscope," or, to quote Sir James Jeans, "Science is possessed of a colour scale which is entirely independent of the imperfections of human perceptions. The scientist will not say that light is red, except as a brief and convenient way of making a rough statement; in his more scientific moments he will speak of light of wavelength of, say, ·00006562 cm., and in doing so will specify a shade of colour in a way which is perfectly objective . . . underlying every red we perceive there is a true objective red associated with either the object we perceive or its illuminant." [1]

But this will not solve our difficulty; what the spectroscope analyses is not the colour perceived, but the light associated with it. That this is a real difference is shown by the fact that Sir James's statement is no longer true if "yellow" is substituted for "red." Red, or a particular shade of red, is associated with light of a

[1] *New Background of Science*, p. 19.

definite wavelength, and any difficulty in identifying the precise wavelength accompanying the perception may be ascribed to imperfection of the sight. Yellow, on the other hand, may be produced in two different ways; it may be due to light of a definite wavelength or it may be due to a mixture of red light and green light. Here the disagreement between the eye and the spectroscope is of a type different from that which occurs when the spectroscope distinguishes two shades of red which the eye confuses. In the latter case the sameness to the eye is the last term of a series; we can have two sets of red patches approaching nearer and nearer in colour until they became indistinguishable to the eye, while the spectroscope would still detect a difference; at some further point the spectroscope would fail, though we might have other reasons to believe that the wavelengths were not absolutely equal; in any case the eye and the spectroscope would agree in asserting that the colours of the two sets approached more and more closely. In the case of the yellows nothing of the sort occurs; the red and the green into which the spectroscope analyses the composite yellow are no more like the monochromatic yellow when the eye sees a close resemblance between the yellows than when they obviously differ. The eye therefore asserts a definite relation of which the spectroscope knows nothing; if light of the wavelength corresponding to the monochromatic yellows did not occur in nature we could still say, as we do now, that red and green made yellow, but such a statement would have no meaning spectroscopically. We can thus distinguish the case of the yellows confounded by the eye and separated by the spectroscope from that of the pinks confounded by the normal man and separated by the colour-blind. The colour-blind man matches two pinks with two blues which the normal man distinguishes from each other and from the pinks, so that the latter sees three shades where the former only sees two, and even if such blues never occurred in nature, so that this test failed, the colour-blind man could never make a statement which had no meaning to the normal. We must conclude then, that, although the spectroscope gives interesting and important information as to the conditions and concomitants of colour, it has nothing to do with the theory of colour perception proper.

Such a distinction occurs in the case of other qualities, though it is not often that it can be so clearly proved. What Whitehead calls the "shapeiness" of a shape is not the same as its geometrical form. We must distinguish roundness from circularity or sphericity; the one is the perceived shape and corresponds to the perceived colour, the other is the geometrical form and corresponds to the spectroscopic analysis; the relation of the shape to the geometrical

form is as much an empirical discovery as that of the colour to the wavelength.[1]

We must, therefore, return to our direct perceptions of colour and our super-observer who combines distinctions seen by all real observers. Such a super-observer is, of course, mythical, but he is not mere mythology; he is no more mythical than the isolated philosopher building up the universe out of his own experience, as Descartes tried to do. We cannot discuss colour, or anything else, except by the help of words, and words essentially convey the experience of others as well as our own; so we must not be surprised if our conclusions cannot be expressed in terms appropriate to any actual, or even possible, single observer.

We can now define the colour of an object; it is the colour seen when the object is viewed by vision of the greatest power of discrimination in circumstances permitting of the greatest discrimination. But this colour is not actually seen, or is seen only by accident. The necessary observer is, as has been pointed out, a myth, and if any other person actually did see the colour in question he would not know it, or, at best, could only do so by comparing his perception with the result of an inference.[2] Indeed, we shall see later that it is very doubtful whether the statement that one observer sees the same colour as another has any real meaning, and this

[1] "Nous sommes dans une classe de 4^{me}, le professeur dicte; le cercle est le lieu des points du plan qui sont à la même distance d'un point intérieur appelé centre. Le bon élève écrit cette phrase sur son cahier; le mauvais élève y dessine des bonshommes; mais ni l'un ni l'autre n'ont compris; alors le professeur prend la craie et trace un cercle sur le tableau. 'Ah!' pensent les élèves, 'que ne disait-il toute de suite: un cercle est un rond, nous aurions compris' " (Poincaré, *Science et Méthode*, p. 129).

[2] In this paper I am using the words "infer" and "inference" in a somewhat different manner from that now usual. "Inference" is now generally confined to conscious processes, and for this usage there is much justification, as it emphasizes certain important distinctions. On the other hand, it conceals certain distinctions which are important for my purpose. The assertion "this leaf is green" is no more the result of conscious inference than "I am seeing green," but there is an important difference between them; the latter can, with a little explanation, be made to satisfy the Cartesian test of certainty, but the former never can. That it may be valid it is necessary that there should be, if not an actual, yet a possible inference. Between the data and the conclusion can be inserted, at least theoretically, a number of steps, and the result will be an inference in the strictest sense; moreover, if these steps could not be inserted, or the inference were incorrect, the assertion would be false, or at best only accidentally right, right as an answer drawn from a lucky bag might be. I shall usually say that such assertions or conclusions are of the nature of inference or contain an element of inference, but as these phrases are rather lengthy I may occasionally have to use the word "inference" by itself. It is a defect in philosophical language that it contains no word to express the distinction I mean, but I know of none.

doubt becomes still stronger when one of the observers is imaginary. In short, the colour of an object is not perceived, but constructed. This will become clear if we consider how we assign a colour to an object. If the object is only seen once our statement that it has a particular colour is vague and doubtful; it depends entirely on the judgment (expressed or implied) that the circumstances in which the object was seen were not likely to have interfered much with our perception of the colour, or else that they were likely to have introduced a change of a particular sort, for which we have allowed. In either case the basis of our statement is not mere perception but perception *plus* inference; but if we say "it *looked* red," i.e. the colour we saw on looking at it was red, no element of inference is involved, and we are not really making a statement about the colour of the object, only about one of the circumstances from which the colour is to be inferred. When we see the object again and again we do not, if we try to be accurate, say more than that "it *looks* the same," i.e. the colours seen on the different occasions have a general resemblance and the colour of the object has probably the same resemblance to them all, while for scientific purposes we must go through an elaborate comparison and realize that even then we have probably not attained absolute accuracy.

Of course the colours perceived on particular occasions are not constructions, they are the elements from which the colour of an object is made up. Neither do colour names always denote construction. When I say "this leaf is green," I make one or more, probably both, of two different assertions (*a*) "the colour perceived by me on the occasion of looking at the leaf is green," and (*b*) "the colour which would be perceived by the best sight on looking at the leaf in the best light is green." The colour referred to in the second case is not perceived by me and may well never be perceived by anyone. But "to be green" is something which can be asserted both of the perceived and the unperceived colour.

We will therefore consider what we actually communicate by means of colour names and how it is done. In the first place we notice that "I am seeing green" or "this which I see is green" are statements of a different type from "that object is green" or "the grass is green." The former are dependent on perception and memory only, the latter involve an element of inference. Accordingly no other person's evidence is relevant to the former, no one else can confirm or deny them; but "that is green" or "the grass is green" can be assented to or denied, confirmed or confuted. It is, therefore, statements of this type which are fundamental in communication, for it is only by means of them that the others can be understood. The first thing to be noticed is that such statements do their work through the mediation of objects, for we can only explain a colour

appellation by indicating an object which shows the colour. Yet the colour of the object is not the fundamental conception, for the office of the object is to identify, not the colour, but the occasion on which the colour is perceived. If we were to describe something as "yellowish-grey, like a rosy face seen by sodium light," the description would be enough for anyone who had had the necessary experience, but we should be denying, not asserting, that the colours of the two objects referred to were the same. We therefore find ourselves still dealing with colours perceived on particular occasions, and our fundamental statement is "the colour seen on occasion A is like (or unlike) that seen on occasion B." It is by means of such statements as these that we explain our use of colour terms (I do not mean that we necessarily learn the meaning of colour terms originally through such formal statements, only that any process of learning colour terms must, if schematized, be schematized in this way). There is, however, a specially important combination of statements of this type, namely "A is different from both B and C, but more like to B than to C." These are the basis of our whole nomenclature of colour; when we say that a penny stamp and a pillar-box are both red we do not mean that they are indistinguishable, but that each is more like to the other than to anything we should not call red. It may be objected that a purple-red and an orange-red may be less like to each other than they are to a distinct purple and orange respectively, but I think that in such a case we feel that to apply the same name to the two colours is, to say the least, unfortunate; the cause of our doing so will appear in the sequel. The statement above may therefore stand, but we must inquire whether this is all we mean or whether we can, by means of colour resemblance, communicate something more than colour resemblance. Examination of the words we use for colour may help us here. To indicate a colour for which there is no recognized name, there is obviously nothing but to give an example. (A spectroscopic analysis is, as we have seen, a statement about the conditions for the appearance of the colour, not about the colour itself.) Such examples may be conventionalized; when we speak of "cherry-red" or "apple-green" we think of cherries or apples, but recognize that particular sorts are involved; the children's joke about a "cherry-coloured cat with rose-coloured feet" (a black cat with white feet) illustrates this. A stage further are such words as "lilac," "violet," or "orange"; they are generally used without conscious reference to the corresponding objects, but such reference is very near, and would appear at the slightest question. "Purple" illustrates another stage; it is undoubtedly named from the murex dye, but we rarely think of the dye when we use the word, in fact few of us have ever seen it. When we come to such words as "red," "blue," and "yellow,"

we can only say that it is probable that in the first place they denoted objects; all trace of what these objects were is lost.[1] Now what are we to conclude from this? Shall we say that as some colour words undoubtedly contain a reference to objects, such reference must be supposed to be present in all such words, although the memory of it has vanished? or shall we rather infer that as some colour words can do their work without reference to particular objects, every such word really conveys something distinct from any object, and that the reference to a definite object, or sort of object, where it occurs, is merely accidental, or rather the scaffolding retained when the house is complete? The latter view is the realism of the man in the street, the former the more learned theory.

A piece of evidence on the nominalist side which has not been much noticed is the extraordinary fluctuation in the meaning of colour names. The *New Oxford Dictionary* tells us that "blue" is probably the same as the Latin "flavus"—"yellow"; the variety of things described as "purpureus" in Latin literature is notorious; but perhaps the most curious instance is an Arabic saying quoted in Clerk-Maxwell's letters, "There are three green things—meat, wine, and gold." If such words as yellow, blue, and green denoted distinct entities, we could imagine occasional difficulties over a border-line case, but such transformations as these would be hard to account for. It is true that names of material objects shift strangely; the names of trees in the Aryan languages are an excellent example: φηγος (oak) = fagus (beech), fraxinus (ash) = birch, and so on. But in such cases the experience which determines the names has generally changed too. A tribe passing from one region to another would find new trees in place of the old, and it would be easier to use the old names than to invent new, but with colours this would not happen, the sky is blue and blood red everywhere.

But this raises a further difficulty; if the names of colours do not denote definite entities but simply collections of particular perceptions, on what principle are these collections made? Such statements as "A is different from both B and C, but more like to B than it is to C," may suffice to arrange the colours seen on different occasions, even to order them in a continuum of any number of dimensions, but they will not give a reason for dividing this continuum into portions denoted by different names, or for preferring one such division to another. As the geometry of a sphere gives no means for locating any place on it and we must choose a meridian of Greenwich on non-geometrical grounds, so our ordered colour-continuum requires grounds going beyond colour-resemblance for choosing particular regions of it to bear special names. Such grounds

[1] See *New Oxford Dictionary*.

can be found in the interests of the users of the terms in matters other than mere colour-resemblance.

In this way we may explain the repugnance which the ordinary man undoubtedly feels to regarding "red" as simply a name for a collection of particulars, or, what is really another aspect of this repugnance, the distinction between "red" and "redness." It is plausible to say that "red" as a mere adjective is simply a name for all red objects, but "redness" or "red" as a substantive seems to convey something more. And this is true; "red" means, not only that the object referred to is like certain other objects, but that some of these objects have a special importance which has impressed itself on our minds and our way of looking at things. The colour-sensations which group themselves round massive or impressive experiences, the green of the leaves, the blue of the sky, the red of blood, will seem to form natural classes and give rise to special colour names.

The distinction, therefore, between "redness" and the mere adjective "red" is that "redness" includes the emotional reaction to objects resembling certain typical and important objects; it is by no means a simple term as is sometimes supposed. The distinction becomes clearer on noticing that it is only the colours connected with massive or impressive experiences which readily give rise to such abstracts; "redness," "blueness," "blackness" are familiar, but "purpleness" and still more "lilacness" and "orangeness" could only be made on the analogy of the others, no one feels a need for them.

"Yellow" will repay special consideration; as explained above, it may be physically compound, but psychologically it is as simple as "red" or "blue." Compare it with "purple"; no one is astonished at hearing that purple is a mixture of red and blue, but it is a shock to most people to be told that yellow is a mixture of red and green. This is intelligible on our theory because yellow, being the colour of sunlight, of gold, and of corn, is strongly charged with emotion, so we do not feel it to be like green or red, while there is no such obstacle to feeling purple to be like red or blue.

To recapitulate: the name of a colour has a twofold reference; firstly to a collection of perceptual situations, of occasions which are seen to have colour-resemblance, and secondly to an important and representative set of these occasions which have in addition an emotional resemblance. This emotional resemblance is not necessarily the result of direct experience, it may result from communication by others;

> This my hand will rather
> The multitudinous seas incarnadine,
> Making the green one red

is vivid and impressive to many whose experience does not go beyond a cut finger.

The colours as perceived by any observer form a manifold ordered by relations of resemblance. As these relations have a structure which is approximately the same for the great majority of observers, and as corresponding relations hold between occasions which are recognized on other grounds as similar, communication and agreement are possible. Colour names denote portions of this manifold, and the manner in which these portions are selected is arbitrary in so far as the manifold and its ordering relations are concerned. It is determined by the past experience, emotional history, and common tradition of the users, and these are sufficiently uniform to insure approximately constant division of the manifold. This renders, not only communication of colour facts, but a uniform colour vocabulary, possible. Any unusual divergence between the experiences of different speakers causes them to make different divisions of the manifold, and we find such discrepancies as I have described. Nevertheless, the experiences common to all humanity are sufficient to ensure a general scheme of colour terms, and to cause the discrepancies to be noted as exceptions.

The part played by the emotional element in the use of colour terms is illustrated by the poetical use of "red" as an epithet of flame. Of course flame is to some extent red, but in any accurate matching of colour by far the greater number of flames would prove to be yellow or orange. The reason for the epithet appears to be that it is really used to emphasize the elements of violence and destruction, which are associated with red for other reasons. The Arabic saying to which I have referred may perhaps be explained on similar lines; its true meaning would then be that meat (a luxury to many Arab tribes), wine, and gold produce excitement and exhilaration like that felt on the sight of an oasis in the desert.

The use of general terms for colours therefore demands a common physical experience and a common emotional experience. Of these the former is the more fundamental; we can imagine a race of beings whose range of vision and power of colour discrimination were the same as our own, but who would divide the spectrum in a manner quite different from ours, making more or fewer "psychological primaries." Such beings would have a colour language into which ours could not be translated, but nevertheless an understanding would be possible. If the physical basis failed there would be no more to be said.

We will now consider the question "Can a colour be defined?" Imagine a man sensitive to light of every wavelength visible to the ordinary man, and to differences in intensity of light, but without any perception of difference of wavelength, so that the world

is to him purely monochrome; in short, let his eye function like an orthochromatic plate. In what sense, if any, would it be possible to define a colour so that such a man could understand and use the definition? We will for the moment waive the difficulty arising from the fact that the same colour may arise from different wavelengths and say that "green" is the name for light of wavelength lying between definite limits. Our supposed observer could then verify that chlorophyll is green and follow any discussion on the connection between its colour and its function of synthesizing sugar, but he would not be using the conception of colour any more than a normal physicist does when he discusses the properties of infra-red or ultra-violet radiation, which cannot be seen and have no colour. It would seem that in thus defining a colour the thing to be defined has slipped through our fingers. And yet the definition appears to meet Professor Stebbing's requirements[1] that the expressions must be asserted to be equivalent and that the defining expression must contain more words or symbols than the defined expression. This, however, depends on the sense we give to "equivalent"; if we mean "equivalent in extension" the conditions are satisfied, and the next step is Russell's view that definitions are purely typographical conveniences; in this case it would not matter whether the concept of colour is employed or not. Nor does it from the scientific point of view; for scientific purposes equivalence in extension is the only equivalence that matters, and the names employed are mere implements to be used and rejected at our convenience, but we cannot say this in any other connection. We thus have another ground for rejecting Sir James Jeans's view that colour can be defined by wavelength.[2]

Let us then try again; can we tender a definition which would help our imaginary being to understand

> Annihilating all that's made
> To a green thought in a green shade?

To a certain extent, yes. Tell him that green means "leaf-like" and he will have some appreciation of Marvell's couplet. It would connect itself with the summer shade and "the banners of the vanguard of the spring." But his appreciation would be incomplete, as he would know the resemblance between grass and leaves by report only, and not by direct perception, nor would he see the difference between the trees in summer and in autumn. Of the two deficiencies the former is the more important; for scientific purposes

[1] *Modern Introduction to Logic*, p. 423.

[2] I imagine that Sir James would admit this, but say that his definition was offered for scientific processes only; my point is that such a definition ignores the element by which colour is colour.

direct knowledge and reported knowledge are equivalent, if they were not, scientific progress would be impossible; but where emotion is concerned the difference is enormous. It would follow that if the significance of a colour name is partly emotional, as has been maintained, a definition of a colour may not be useless but is necessarily inadequate.

We will now consider the problem of universals as exemplified in colour. In so far as we are concerned with the relation of a general colour name to the various shades covered by it we must give a nominalist answer. A scheme of colour names divides the colour-manifold into a number of regions which are determined, not by any intrinsic character of the manifold, but by the experience of the imposers of the names in respect of matters other than colour on occasions when colour also has been present.

If, however, we turn to the other meaning of universal, according to which a particular shade of colour is reckoned as a universal, and the instances of its occurrence as particulars, or, in Whitehead's phraseology, we consider the colour as an eternal object, the problem is different. In the first place, have we any right to say that a colour actually recurs in space or time? and how do we know that it does so? When I look at my blotting-paper I may say that two portions are of the same shade of pink, but on closer examination I may perceive a difference; even if I do not I can never be sure that a better sight, or a better light, would not reveal one. But this refers to the colour of an object, and, as has been shown, the colour of an object is an abstraction, or rather a construction, having much in common with a mathematical point. We must therefore turn to the colour perceived on a particular occasion and recollect that it is a function, not merely of the object seen, but of the whole situation. There is, then, no inconsistency in saying that the same colour appears in two places at the first glance and is replaced by two colours on closer observation, for the effort of attention which reveals the two colours is not mental only, but also physical, and can be perceived as such; a behaviourist would say that it is physical *only*, but we do not need to assert this; we only need to say that a perceptible physical change occurs, and this will readily be conceded; the physical situation being thus changed, it is reasonable that the colour perceived should be changed too.

It appears, then, that there is no appeal from the judgment that two colours seen by the same person at the same moment are the same, but the grounds on which we have come to this conclusion show how little meaning or value it has. In the first place, we must give up all hope of showing that two persons ever see the same colour, for the difference in the physical situation when two persons look at the same object is presumably greater than that arising

when one person regards an object with increased attention; it is of course conceivable that the differences in the situation would cancel out and leave the perception unchanged, but even if this happened there would be no means of knowing the fact. Neither does this conclusion involve solipsism; to avoid solipsism it is necessary and sufficient that two persons can identify the same occasions, not qualities of the occasions. If A says, "On occasion X I perceived a colour like that I perceived on occasion Y and unlike that I perceived on occasion Z," B can identify these occasions and say whether his experience was similar or not, and we have seen that all communication about colour is fundamentally of this type. Whether the colour seen by A on any of these occasions was the same as that seen by B is simply irrelevant, and, for the purposes of their communication, meaningless, as long as the relations of likeness and unlikeness hold among the colours seen by each.

We will now turn to colours seen by the same person on different occasions. Here we do seem to have a definite consciousness of identity which is impossible when different persons are involved. But consider such a statement as "Those curtains will just match the sitting-room carpet—no they won't, it is too red," and suppose that the change of opinion arises not from closer inspection of the curtains but from a change in our remembrance of the carpet. On a theory of psycho-physical parallelism the change in remembrance would be accompanied by a physical change, and the case would be like those already considered, but this change is not directly perceived, like that accompanying increased attention; but it is only introduced *ad hoc* to account for an event otherwise known, and it is the nature and source of this knowledge which we are investigating. It may be said that we only have an instance of the well-known fact that memory is fallible and corrigible by memory, but what the instance proves is that the apparent consciousness of identity is fallible, and need not prevent us from denying the identity if we find reason to do so. And there are such reasons; the apparent identity may not obey the formal laws of identity; it is possible to have three colours A, B, and C such that A is indistinguishable from B, and B from C, yet A can be distinguished from C. It might be thought that this was an error to be corrected by further inspection, but, as has been pointed out, in trying to do this we pass from the colours perceived to the colours of the objects observed; the discrepancy in the original judgment remains and is incorrigible. Of course this is not the only case in which it is necessary to admit that direct judgments may be wrong, but such judgments usually have an external reference. In this case there is no such reference, our judgment is of something directly perceived and has no reference except to this something as perceived. These difficulties can be

avoided if it is really meaningless to speak of numerical identity or difference between the colours perceived on different occasions, absolute colour having no more significance than absolute position. The fundamental perception will then be, not "this occasion has this or that colour," but "this occasion has more or less colour resemblance to these other occasions." Colour-resemblance will be a specific type of resemblance directly perceived, but as it essentially admits of more or less our former difficulties vanish. Whitehead's "eternal objects . . . haunting time like a spirit" would seem to vanish too.

The importance of our earlier discussion of colour names is now clear; if they were really simple, as is usually supposed, the theory I have just set forth would be very difficult to maintain, for such simple terms would denote entities of the sort which I have denied; but if "red," for example, is a term of extremely complex reference, grounded, not merely in simple perception, but in the whole history of the race, there is no reason why it should denote a simple recurring entity.

The position thus reached is like one suggested by Russell[1] but rejected on the ground that it is necessary to admit one type of universals, namely relations, so that it is unreasonable to object to admitting qualities as a second type. If, however, my arguments are sound, there is a real distinction between the two cases, and it may be necessary to hold a realist theory for one and a nominalist theory for the other. I do not, however, propose to examine Russell's theory of relations.

[1] *Problems of Philosophy*, p. 149.

SOME PROBLEMS IN THE PSYCHOLOGY OF TEMPORAL PERCEPTION

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Perhaps it is unfortunate that, no matter what problems a psychological investigator elects to attempt to discuss, he is almost always confronted by a number of different and often conflicting points of view. The twisting paths revealed by these may one day be found to unite into a broad road, but most of them have as yet been insufficiently explored. Certainly problems in the psychology of temporal perception seem to lie in many different directions, according to the ways in which they are approached. It would be possible, for instance, to take the mass of experimental work, always patient, sometimes brilliant, which has had a fairly continuous history since Czermak, in 1857, building upon Weber's researches into space perception, planned and began to carry out a programme for an investigation of the estimation of short time intervals. But then, within the limits of a short article, nothing else would be possible, and although it is high time that somebody who has more sympathy and insight than most of the critics have displayed attempted a review of this work, I think that this would hardly be the proper occasion. Or again, it would be possible to try to describe the investigations which have been made of how and when the dawning intelligence of the young child begins to make temporal distinctions, or to understand and use the conventional time measures which are current in its world. That also would occupy much space and answer but a few of the questions which I desire to raise. Once again, the attempted constructions of the theoretical psychologists could be surveyed. In that case, too, nothing more could be done, and the theories, taken from their context and expressed very briefly, would appear ingenious and puzzling rather than convincing. From all of the past history of investigation and speculation in this realm I hope that I shall profit; but I shall devote myself in detail to none of it.

There is, however, one question which is bound to force itself upon anybody who surveys the mass of work that has been done, and may form a very good starting-point for discussion. Nearly all the scientists and theorists who have studied the basis of our experience of time have assumed that it is necessary to begin with exceedingly small units. Experimentalists have again and again demonstrated that there is a brief interval—round about 0·6 second in our con-

ventional time measures—which the normal person can appreciate and reproduce with remarkable consistency and accuracy, and have tried to build everything upon this. The genetic psychologist has turned his sleepless and unwavering eye upon the animal or the infant to find the first sign it makes of noticing a difference between what is "now" and what was "just now," and has said that here is the basis of all temporal distinctions. The theoretical psychologists, in ways that must have sorely puzzled all intelligent students of psychology, have written about a "unitary experience of duration," about a "psychical present" in which everything is momentary and yet some things follow one another. Sleight of language is to many a psychologist what sleight of hand is to the conjuror. He will put things together and give them one set of names, and then he will take them apart and give them another set of names, and in this manner may succeed in persuading himself and others that he has made some noteworthy discovery.

Perhaps the basic temporal responses have nothing necessarily to do with the brief and fleeting moment. One thing is certain, and that is that *all* psychological distinctions, and the temporal distinctions among the others, are possible only when behaviour, reactions to external stimuli, have already become highly and firmly organized. Moreover, all psychologists agree with nearly all other people that temporal distinctions are bound up with memory. Then the psychologist has looked for the most elementary kind of memory reaction, and often he has fixed upon what he calls the "primary memory image." A man listens, say, to the boom of Big Ben as it strikes the hour. Every stroke is treated as a unit, yet within each unit are differences: the sound of the stroke rises, fluctuates, falls, passes on to the next. At every instant something is "here" as an image, and something else as a percept. Of course this would not help us in the least unless we had already learned to make the distinction between the image when it occurs and the percept when it occurs, so that we know that a percept refers to something that can be treated as objectively present—in a spatial sense—whereas the image need not do so. And that distinction also would not help us either, because it might mean that what is perceived must be treated as "here," but what is imaged may be treated as "there." What we want is something to tell us that the percept is "now," whereas that which the image indicates was "then."

These considerations apart, however, there seems no good reason to believe that primary memory images do actually develop in every experience in this automatic and immediate manner. You give a dog a biscuit when he is not hungry and he goes off and buries it, returning at once to his game, or his sleep, or to whatever he may have been doing. The biscuit does not worry him any more till a

long time afterwards, when perhaps he suddenly rushes off and digs it up again. For the young child, more often than not, the passing stimulus seems to induce a fleeting reaction which has no immediate echo. Anybody who has tried to study the primary memory image in the average adult, in the accredited fashion, will have been depressed to find how very often he can get no evidence at all of its occurrence. The psychology of time may be bound up with the psychology of memory, but that it has much to do with the primary memory image seems unlikely. And if this is the case, perhaps also basic time responses have less to do than people have thought with brief time intervals.

Let us therefore begin our search again, with this principle firmly in mind: that there is *nothing* psychological which has not already behind it a long history of biological, physiological and neurological development. This is to say, that primary and basic temporal distinctions presuppose a vast amount of organization of reactions before they can be made at all.

Now there is one feature about the organization of organic reactions which is impressive and from our point of view looks promising. It is that all relatively simple organization of animal and human reactions tends to be sequential, the sequence following an order of original occurrence. For this there is a great amount of evidence in chain reflexes and in circular reactions; in the ease with which stereotyped sequences of bodily movement can be set up and the consistency with which they are maintained; in the way in which incoming afferent sensations are utilized, in the order in which they occur, to guide succeeding responses; in the large part that relatively fixed serial habits play in daily life. There is psychological evidence also in the fact that early, or primitive, recall tends to be rote recall, and in the fact that when bits or blocks of reactions and experience get dissociated they tend to produce the undeviating repetition of items of isolated behaviour, of a few obsessive ideas, or of whole stretches of reaction and experience that have definite chronological sequence and limits.

It is obvious that the mere fact that series are established possessing a fixed succession is of no help. We have to try to understand how the properties of established organizations can "enter consciousness," can become known, and, in this case, known as possessing temporal qualities. In general the more thoroughly established a mode of organization is the less is that mode of organization known. If we watch an ordinary person learning to dance, or to play a musical instrument, to make a skilful stroke in a quick game, or to weave a pattern of movement in an industrial task, we find that very often he counts: "One, this"; "Two, that," "Three, the other thing," and so on. Each component movement and the position of

it in the series is picked out. But as skill appears counting disappears. The expert may be able to tell the succession of his movements only with difficulty, when he is challenged; sometimes only by watching somebody else, or by artificial aid like that of a slow-motion moving-picture. It is as if in learning we catch at the temporal properties of the components of the series which we learn, only to lose them, sometimes completely, when the learning period has passed.

This much, at least, is clear, that an organism might possess a number of thoroughly organized reactions, and each organization might in fact show a precise chronological sequence, yet if all that the organism did was to unroll these sequences in the appropriate environment, nothing about their nature would ever become known to that organism. It would be a creature well adapted perhaps, behaving capably, but without a psychology. Even were it the case, for instance, which it is not, that *every* momentary experience were a sequence of percept, primary memory image and prepercept, nothing whatever would come out of that. The ordered series must fail, an accident must occur, it must be broken up, bits must be taken out of it, in order that their significance in the whole may be realized and not merely operate.

There are two sorts of series, of vast importance in human activities, which very readily slip into fixed sequential arrangement, and the second is only a special form of the first. They are bodily movements, and word series. Another fact about them which is of intense psychological interest is that of all human reactions they are the ones most used and of greatest use in social life. In ritual and in dance, in play and in practical activities, group individuals from time immemorial have fitted movement to movement in co-operative effort. In communion or dispute words form almost the most important of all social links.

To try to clear up the next point of the argument I will take an illustration at a fairly high level which may perhaps sound a little artificial, but which will, I hope, bring out the essential principle involved. Suppose two people enter some form of co-operative bodily activity, a dance if you like. The series of movements follow one another in a regular sequence, and for every movement of one person there is a proper corresponding movement of the other. Now suppose that these two people have different reaction-times, or have been trained differently, or are at different stages of practice, or at any rate show one or other of the large number of individual differences which may affect their performance. At some point or other they will be out of step. It is no use beginning all over again—a device which lots of people try in such circumstances—because the same thing will happen once more. To set things right this organized

series of movements must be broken up, and each person or both of them must find what parts of it led to inefficiency. Also in this case a spatial correction is not enough. It will not do for one to be here and another to be there; one must be here and the other there *simultaneously.*

The principle is that there have to be at least two series of adjustments the various items of which must synchronize if the series are to proceed smoothly. For one or more of many possible reasons certain items fail to synchronize. This challenges analysis, and the result of the analysis is that certain items are picked out of the series and corrected. If the series are of movements spatial correction is not enough, temporal correction is also essential. With human beings, whenever any character of an event is picked out, is forcibly selected, because it has practical significance, it tends to get a name. So the temporal distinctions, which are objectively there all the while, gain names, and are now there for the performer as well as there in the sense that they affect performance.

So far I have written as if the typical way in which we come to be able to make temporal distinctions is bound up with some social situation. Very likely it is true that the making of time distinctions is, psychologically, fundamentally a socially determined response. But here I should wish to avoid dogmatism. Let me take another illustration—also, I am afraid, rather a complicated one. It is a common trick of writers of detective stories to introduce obscurely certain detail near the beginning of their record which turns out to be extraordinarily important in the end. Now I read many detective stories, and I have a rooted objection to turning over pages backwards and looking up what I have already read. Let us use the word "image" in its widest of all senses to include any method of referring to an object or event, the external concrete stimuli for which are not immediately present. Then when I am near the end of the story I may find myself completely stumped and unsatisfied unless I can, in this sense, form an image of something that occurred near the beginning. Of course this image and my reading of the last chapters of the book may both be "now," or simultaneous; but in many cases the events of which I am reading and that which is imaged cannot be. "Yes," we may say, "but perhaps the events read about are 'here,' while those imaged may be 'there,' and then this spatial distinction will solve our difficulty." But in many cases this will not work. For example, the image may have to do with intense activity on the part of somebody I know to be dead. I can solve the difficulty only if I treat that which is imaged and that of which I am reading as parts of a single stream of interest some of the items of which are "then" and some are "now." Which are to be treated as then and which as now are no

doubt dependent upon many complicated considerations specific to whatever case we are taking.

Again, my illustration has involved facts which indirectly are of social significance: a developed form of language and of writing. It may be, however, that these are not really essential. We could perhaps take any form of serially organized activity: the movements required to get from one place to another, or those of attack, or of house building. Always we have to remember that the making of temporal distinctions presupposes a highly developed organism, with many avenues of connection with its environment. For such an organism any environment is a world in rapid change, and all kinds of unexpected stimuli may break in to upset the ordered performance of an established reaction series. Whenever that happens the series will go wrong unless it can be broken up and corrected at some particular point. And precisely because the function or importance of any item in such a series depends not merely upon its place in a spatial arrangement, if it can be assigned one, but also upon its position in a successive and interest-determined order, the breaking up of the organization brings those temporal distinctions which express such a position into prominence and into awareness.

The view then demands three things:

(1) The organization of reactions into successive orders.

(2) The breakdown of such organization as a result either of social incompatibility, or of rapid and unexpected environmental change.

(3) The consequent practical necessity to readjust some part of the organized reactions, the characteristic method of which, at a human level, is to pick out some of its items and to learn to realize the factors upon which their functional efficiency depends.

It follows that the basic time distinctions, in a psychological sense, have no necessary connection with objectively short time intervals. Indeed, both the probabilities and the actual evidence of genetic studies rather strongly suggest that time distinctions first tend to be made in reference to intervals which objectively are long ones. To the young child, and for that matter to the average adult, "time" normally means, not "just now," but "long ago" or, derivatively perhaps, "far ahead."

There is almost always a tendency, in regard to any general psychological problem, to search for an explanation which will cover all possible cases. More often than not this is a mistake. There is, for instance, no single origin of temporal distinctions. Sometimes what prompts the search for them is a lack of harmony in co-operative effort, sometimes it is a sudden and unexpected change of environmental stimulation, sometimes it may be a clash of testimony about certain practically significant events, and sometimes, perhaps, it may be the swift surging up of some definite sensorial image which

conflicts notably with whatever is being done or perceived at the moment. Only two general conditions seem to be essential: the first is the formation of organized chains of successive activities through the operation of some biological or psychological interest; and the second is the occurrence of *anything* which prevents or obstructs the performance of such activities. This, however, means that the discovery of time differences is by no means a purely intellectual affair, for it depends fundamentally upon a prior organization of reactions by interest, or some other active process of that order.

That movement series and word series are particularly apt to form stable and effective sequences is interesting in another way. Both of them possess the character of being very easily conventionalized. So that we should expect to find that any distinctions the discovery of which rests largely upon them would themselves speedily yield fixed and conventional measures. This expectation is certainly realized in the case of temporal distinctions. Whether, as I suspect, the discovery of time differences is bound up with social situations or not, certain it is that their conventional treatment is firmly linked to the development of language, and especially to the use of words for counting and for numerical distinctions. A large chapter in the psychology of time is a chapter also in the psychology of language.

This development of time measures and a time language immensely influences the discovery of time differences on the part of the young child born into a relatively settled social group. It is true that we cannot point to "yesterday" or "a week ago" or "tomorrow" as we can to chairs and tables and people, but that there are names for these which will be accepted by the child as he accepts other names, makes his task of realizing time differences vastly easier, and changes its character, too, in ways which I must not now stay to describe.

The discovery of time differences always involves a practical difficulty which cannot be set right merely by spatial adjustment, or by the application of anything that may be known in a direct descriptive sense about common objects. Apparently, before we can know anything about time, we must be able to make space references and to distinguish object from object. The single perceptual reaction of vision, of touch, of hearing, of movement seems to carry with it already some spatial character, and some object reference. But time demands an organization of reactions, and in the sense in which I used the term just now, "images" also are required. It is perhaps odd that most people should at once accept whatever has a direct sensory basis as "real," or valid, or objective, in a way they question when more complex mental processes come into the picture. Yet we all tend to do this, and though to follow this line of thinking would soon take us far beyond the bounds of psychology, we may

find here, very likely, one of the reasons why time often is considered to be in some way less "real" than space or than objects.

Even supposing that what I have written is intelligible enough and convincing enough to be accepted, I can easily imagine that someone will say: "Yes, but all you have written of is the way in which those distinctions which are called temporal come to be made. What about the fundamental time *experience*?"

Here I must confess a very strong scepticism. I doubt whether there is, properly speaking, any time experience at all. I think people talk about duration and the like as an experience, because they have already decided that it is impossible to know that events are in time unless there is an experience of time.

Here the experimentalists certainly ought to be able to help, and it is worth turning to a very brief study of their characteristic procedure. They have been concerned mainly with the estimation, recognition, or reproduction of short time intervals. The customary method is to present an observer with an interval which is initiated and terminated by an agreed signal, it may be of sounds, or of lights, or of any other mode of sensory stimulus. For some purposes it is customary to talk of filled and empty intervals, but it was very soon pointed out that no interval is really empty. Any response set up by a physical stimulus has its own history of development, maximum intensity and decline. Suppose the second of two successive stimuli is presented in such a way that its response begins to develop just before that to the earlier one has declined beyond a certain amount, the interval can be repeated by the observer with remarkable accuracy. But all experimentalists agree that it is not this arrangement which gives a characteristic "time experience," when this phrase is used, but an interval which is longer or shorter than this. If it is longer a certain tension is set up, which has its own sensorial and mental character. If it is shorter the terminal signal produces a peculiar response as if something has not been properly completed. Then the interval is often said to "feel long" or to "feel short," and what this means is that something is occurring between the signals which is affected when the terminal signal is given.

To understand what this is we must consider the conditions and instructions of the test itself. The observer knows that he is to get two signals in succession which he must treat as belonging to one series. If he fails to do this the experiment has no point in it whatever. The giving of the first signal then sets up an attitude which can be best described as one of waiting for the second. This waiting has its own sensorial and imaginal characteristics, and it is these, as they are affected by the final signal, which are experienced. It is, in fact, always the filling of an interval in relation to the particular interest

operating at the time which determines what is called the experience of time. Thus an objectively long time interval suitably filled may appear short, unsuitably filled may appear long; an objectively short interval, unsuitably filled may appear long, and suitably filled may appear short. The time characteristics of an interval as we look back upon it may, as everybody points out, be entirely different, and this is because the interests of retrospect are rarely those of performance. If this is true it follows that, in these cases at least there is no need to assume an *experience of* time properly speaking. That which gives time its character of continuity, so that we treat it as something more than the events which fill it up may be the fact that in a psychological sense it is a function of interests at least as much as it is of intellectual analysis.

If this general approach to some of the problems of temporal perception may be accepted, it follows that time distinctions, as we know them, are not to be treated as a remarkable invention. They are a discovery, a true feat of the development of mind. Once they have been discovered, particularly once they have become conventionalized, human control over the world in which we live is vastly enhanced, and man is helped to move as a master within the clash of change and event which makes up his life.

ADDRESS BY VISCOUNT SAMUEL TO THE INAUGURAL MEETING OF THE NINTH INTERNATIONAL CONGRESS OF PHILOSOPHY

HELD IN PARIS, AUGUST 1–6, 1937 (*Translation*)

I FEEL sure that I am expressing the unanimous feelings of all the foreign members and associates of the Congress when I offer our warm thanks for the most kind welcome that has been extended to us. The great Exhibition has brought a succession of representatives of all the nations to the city which has been for many centuries a metropolis of the world's civilization. It is right that they should dwell, not only on the material manifestations of that civilization, but also on its achievements and its strivings in the realm of intellect. At this International Congress of Philosophy your foreign guests are happy to offer their tribute to the resplendent culture of France.

Among the rest, the British Institute of Philosophy feels it a privilege to participate, particularly since the Congress is dedicated to the memory of Descartes. The greatest contribution of Descartes was the promulgation of his philosophic method, and his method had many points of resemblance with that of our own Francis Bacon. Between the two there was, not indeed an identity, nor even perhaps an alliance, but certainly an *entente cordiale*. We are glad to remember that Descartes was invited to England by King Charles I, who offered him an important post. But for the outbreak of the prolonged and disastrous Civil War, that invitation, it seems, would have been accepted.

Descartes was a precursor. "Le génie," said Victor Hugo, "est un promontoir dans l'avenir." Descartes had genius of that order. He was original above all. He had a healthy disrespect for the philosophers of his own day. Nothing is more dangerous in philosophy than dogma and orthodoxy. The world has suffered much from the tendency to identify philosophy with the study of the classic philosophers; as also to identify religion with religious history, or thought in general with scholarship. As Maurice Barrès has said, "Voilà le meilleur moyen de tout savoir et de ne rien comprendre." We can best imitate the great men of the past, not by repeating their thoughts and their teachings, or copying their deeds, but rather by studying their methods and emulating their originality. We can best imitate Descartes by not being his imitators.

It must be confessed that philosophy in our times has no great influence on the course of events. The ordinary man never thinks

about it. He passes philosophy by; hears it only as a confused murmur of distant voices. The chief reason for this is obvious; it consists in the difficulty and obscurity of much philosophic writing. "La métaphysique," said Michelet, "c'est l'art de s'égarer avec méthode." Many modern philosophers write in an esoteric language of their own. The ordinary man having either to learn the language or to dispense with the philosophy, usually chooses to dispense with the philosophy. It is true that neither the ancient Greeks nor the modern French need plead guilty to this defect. It has been well said: "La clarté est la souveraine politesse de qui manie une plume." French writers usually follow this rule of literary courtesy—the illustrious Honorary President of this Congress, Professeur Henri Bergson, is a conspicuous example. They offer a welcome contrast to the ruthless obscurity of many of the learned writers of some other nations. If philosophers wish to be followed, they must first consent to be understood.

The age of Descartes was a time of uncertainty. Men were painfully groping their way towards new conceptions of the universe, of life, and of morals. It was the birth of the modern era. We are living to-day in a similar epoch, giving birth perhaps to a world that will be different again. A confusion of thought is the mark of our time. The impact of modern science on the old theologies has now affected all classes and almost all nations, and bewilders mankind. The new proximity of races formerly far apart has added to the confusion. The soul of man is troubled. It is seeking some stable abiding-place.

In the confusion there arises a movement which seeks a way out, not in a return to ancient authority, nor yet in a patient rational examination of our difficulties and a resolute effort to solve them. It is a movement marked rather by an anti-Intellectualism, a "Retreat from Reason"; which relies on mere intuition, on unsupported assertion; is animated by a kind of *mysticisme laique*. This movement, as we may all see, is bringing the world into great peril. It produces a primitive barbarism in the realm of ideas. If modern civilization falls, as fell the civilization of Rome, it will be due to the attacks, not of barbarians from without, but of barbarians from within.

From such a fate the ordinary men and women, in all countries, must act in order to save it. They need leaders; the leaders themselves need direction; it is for a wise, a courageous—and a comprehensible—philosophy to give that direction. "Philosophers," said Bacon, "are like the stars, which give little light because they are so high." Let them come nearer to earth; let them deal, not only with epistemological problems of the nature of thought, but also with the foundations of ethics and of civic action. To turn ideas into events is the function of statesmen and of citizens; to find the

right ideas is the function of politics and economics. But who is to set the goal to politics and economics? It is Philosophy, aided by her sisters, Religion and Science. A troubled and anxious world, wandering confused, needs her ultimate guidance. May it be forthcoming.

PHILOSOPHICAL SURVEY

PHILOSOPHY IN ITALY

A RE-PUBLICATION of the whole of the work of Marsilio Ficino, being an impossibility, Kristeller[1] has presented students with a monumental *Supplementum Ficinianum*, in which he brings together everything that was not included in the Basle edition, which he takes for his basis, everything, that is to say, that he has been able to trace in the course of a very thorough search made in numerous Italian and foreign libraries. In a learned introduction there are prefixed to the edition three indexes, of the codices, editions, and works of Ficino, and with each work is given a concise account of its origin, purpose, and fortune in the world. There follows the collection of Ficino's writings, some unpublished, and some having already been published sporadically, but omitted from the Basle edition. The final items are two indexes of proper names quoted in the Basle edition and in the *Supplementum* respectively.

The reason why such a large quantity of Ficinian material came to be left out of the Basle *Opera Omnia* is that this book did not appear until more than sixty years after Ficino's decease. When the philosopher died in 1499, the greater part of his writings had already been published in separate editions, but a number of them were circulating in manuscript codices. However, before the middle of the sixteenth century the manuscript tradition had already died out, and the unprinted works escaped further notice. Consequently when in 1561 Adamo Enrico Petri wished to collect everything that had been preserved of Ficino's into two volumes he was only able to make use of the existing editions, and succeeded in utilizing only a very small part of the unpublished material, as, for example, in the Commentary on St. Paul and the Sermons. A decade later, in 1576, the same publisher issued a reprint of the work, also in two volumes, the first unchanged, the second amplified by the addition of the commentaries on the *Parmenides* and on the *Timaeus*. In conclusion, in the words of Kristeller, "*Ficinus eos libros quos maioris momenti esse putavit suo tempore imprimendos curavit. Deinde post eius mortem iidem libri saepius sunt typis repetiti, alii autem libri quamvis codicibus divulgati, in lucem non iam prodierunt. Tum editor Basileensis omnes eos libros iam ante separatim impressos in unum corpus coniunxit. Sic ultima tardae illius editionis causa ad ipsum auctoris consilium potest referri*" (p. clxxx).

From a philosophical point of view, what is the value of the material contained in this *Supplementum* for a knowledge of Ficino's thought? It is not easy to give a concise answer to this question. Only a thoroughgoing examination of the whole of Ficino's work could tell us how far the newly unearthed material enhances or modifies our estimate of the philosopher, based on the pre-existing material. And, since the same editor is preparing a comprehensive monograph on Ficino, we must await the results of his new labours. By what I can deduce from a first reading of the *Supplementum*,

[1] SUPPLEMENTUM FICINIANUM. *Marsilii Ficini florentini philosophi platonici opuscola inedita et dispersa primum collegit et ex fontibus plerumque manuscriptis edidit auspiciis Regiae Scholae Normalis Superioris Pisanae Paulus Oscarius Kristeller. Accedunt indices codicum, editionum, operum Ficini nec non documenta quaedam et testimonia ad eundem pertinentia.* Vol. i, pp. clxxxi, 141; vol. ii, pp. 382, *Florentiae, in aedibus Leonis S. Olschki*, MCMXXXVII.

I tend to the belief that no really new grounds for a modification of opinion have come to light from Kristeller's erudite researches. There is little of doctrinal significance in the additions to Ficino's correspondence; they are in general brief letters from or to Ficino, which, whether owing to the philosopher's pacific temperament, or to the mediocre philosophical competence of his correspondents, bring in no speculative controversial question, and confine themselves to elementary items of information. On the other hand, a *Disputatio contra iudicium astrologorum* is of great interest, and merits a comparison with Pico della Mirandola's work of the same title because it contains *in nuce* the principal arguments of which the latter avails himself in order to confute the pretended science of astrology. And, since the one is anterior to the other, a comparison between them would result in a notable diminution of the originality of Mirandola in handling this material. Some short philosophical treatises in Italian are also of noteworthy interest, being perhaps among the earliest documents of the use of the vernacular in philosophical studies. Finally, of great importance are Kristeller's biobibliographical annotations on the correspondents and on Ficino's contemporaries in general whose names recur in his works. They represent a notable contribution to the reconstruction of the cultural environment of the fifteenth century in Italy.

Another recent publication on the Italian Renaissance is an essay by Anagnine on Pico della Mirandola,[1] well-informed from the point of view of the history of philosophy, but not as well balanced in the distribution and development of its parts. The introductory chapters are good, describing the cultural environment, both mediaeval and humanistic, in which Pico developed, that is to say the universities of Padua and Paris, and, although it does not come sufficiently into the picture, the Florence of the Medici. In his analysis of the works, Anagnine attaches excessive importance to the 900 theses of the unsuccessful Roman dispute, regarding them as organic expressions of an already formulated religio-philosophical system of thought, while they are only a congeries of unconnected elements, and the "show-pieces" and paradoxical views are far more in evidence than the more thoughtful and personal themes. Hence the Apologia also, which Pico wrote following the condemnation by Rome of the theses, is taken far too literally by Anagnine, as a defence of a philosophical system rather than as a clever retractation in which the venom of some heretical arguments was diluted in more prolix explanations of orthodox savour. The author proceeds to deal at length with Pico's cabalistic studies, through which he skilfully traces the neo-Platonic thread from which originates the far-reaching relationship (dreamed of but not realized by Pico) between Hebrew, pagan, and Christian religious thought and the philosophies of Plato, Aristotle, and Plotinus. This is the most original part of the book, because the author has taken the trouble to go directly to Pico's cabalistic sources.

The analysis of the work *Against Astrology* is utterly insufficient, and an examination of the famous *Discourse on the Dignity of Man* is deliberately excluded from the study. In this way Anagnine seeks to react against the current interpretation of Pico as an exponent of the individualistic tendencies of the Renaissance, placing instead the universalistic-Christian conception of the Middle Ages in the forefront of his speculative conception of his author. But Anagnine does not perceive that what he gives us in the final chapter of the book as "the vision of Pico's world" has nothing personal about it, but is only the general neo-Platonic scheme common to all the

[1] E. Anagnine: *G. Pico della Mirandola*. Bari, Laterza 1937. (*Biblioteca di Cultura moderna*, octavo, pp. vi, 277.)

thought of the time, and that while it constitutes the irremovable background of his philosophy, yet on the other hand the original interest of the new man is revealed in some divergent or emergent motives, one of the most significant of which is offered by the *Discourse*. Anagnine's mistake lies in having tried to trace a philosophy formed as a whole in the mould of Pico's mind—"a solid block of granite without cracks or crevices of any kind"—whereas this philosophy was a heritage of tradition and the novelty consists in the "cracks."

With regard to the treatise against Astrology, Anagnine remarks that it has been a matter for astonishment "to see Pico so imbued with the Cabal and with magic, down to 1489, transformed later about 1492, into a bitter and implacable adversary of the science of astrology, which after all was *'eiusdem farinae'* and which professed ideas not unlike those of his youthful enthusiasms on the close links between heaven and earth. Of this astrological science his own master, Ficino, was an ardent follower for some time, at least, and its cosmic universalism would seem to favour the ideas that arose in Italy at that time, where they spread widely and achieved popularity. From this attitude of wonderment to speaking of a spiritual crisis which took place in the course of these years was only a step. For the flagrant contradiction into which Pico stumbled when he denied the marvels of astrology after having formerly exalted the wonders of magic an explanation was soon found. Pico's cabalistic ardour must be no more than an error of youth, the product of an inexperienced and too enthusiastic mind. The mishaps that he incurred with his imprudent adhesion to the Cabal must have opened the eyes of one who was a noble victim of these not uncommon superstitions" (p. 238). Anagnine is right in holding this presumed conversion as a fable, but seeing that he participates in the same error as his protagonist, Soldati, that magic and astrology are on the same mental plane, he is compelled to tread on slippery ground in order to demonstrate that there is no incompatibility between the profession of magic and the refutation of astrology on the part of Pico. Now I believe I have shown that not only in the foundations of Pico's work, but following the whole course of Renaissance astrology, down to Weigel, there is a constant tendency among humanists to oppose astrology to magic, and to reject the former as the expression of an astral fatalism repugnant to the new feeling of human autonomy and accept the latter, not only as the expression of an intimate consensus between the forces of man and those of nature, but also as a means by which man could dominate nature directly, because the magical formula of which the magician holds the secret enables him to imprison and to release the immeasurable forces of the macrocosm. But Anagnine does not seem to be aware of my work, *Rinascimento, Riforma e Controriforma*, although it was an elementary obligation for him to take note of the only general work on the theme of his book published in Italy.

GUIDO DE RUGGIERO.

(*Translated from the Italian by Constance M. Allen.*)

NEW BOOKS

The Destiny of Man. By Nicolas Berdyaev. Translated from the Russian by Natalie Duddington. (London: Geoffrey Bles: The Centenary Press. 1937. Pp. vi + 377. 16s. net.)

The author of this remarkable book is a Christian thinker in the succession of Augustine, Pascal, Kierkegaard, to whom Christianity is neither a parable or symbol of eternal truths essentially independent of the events which have served the purpose of bringing them home to others than philosophers; nor yet a revelation of truths inaccessible to reason, superimposed, as it were, upon a body of otherwise ascertainable truth, which it proves indeed, by the information which it imparts concerning this higher region, to be an incomplete and inadequate, but a positively incoherent or even, so far as it goes, an obviously defective account of reality; but the only solution of paradoxical and baffling problems presented by experience to the intelligence of a being disastrously fallen from his original condition and dependent upon the intervention of supernatural grace for the healing of its wounds. It is not surprising that in the work of such a man it is less easy than when dealing with that of thinkers of the types above contrasted with his for a reviewer to confine himself to matters which readers who do not share the author's religious faith would allow to be of philosophical interest; and I have found it impossible in this review to do so.

M. Berdyaev comes forward as a defender of the independence of philosophy against the encroachments of religion and of science alike, complaining that in modern times it has only escaped the former tyranny of theology to fall into a still worse slavery to "autocratic and despotic science." It is no true philosophy if it be not free to face truth, brooking no external constraint from either the one or the other. Yet, if a philosopher is a believer in a revelation, "his thought is bound to be nourished by it." It is for him, however, "not an external authority but an inner fact, a philosophical experience." The Christian thinker is not bound to make his philosophy conform to any theological system; but he owes to his religion "facts and experiences which enrich knowledge" and so "make his philosophy different from that of non-Christian thinkers."

The first chapter deals with "the Problem of Ethical Knowledge." In this "legalistic, normative ethics, for which freedom is merely the condition of fulfilling the moral law" are set aside as inadequate, because this conception of morality "leaves out of account the magic aspect of moral life." The true ethics "must deal both with the tragic and the paradoxical," for "moral life is made up of paradoxes in which good and evil are intertwined" and which "cannot be solved rationally, but have to be lived through to the end."

M. Berdyaev passes in his second chapter to discuss "the Origin of Good and Evil." This cannot, we are told, be explained apart from a prior question as to the relation between God and man, for "the ethical problem presupposes a theodicy." "The good as well as the wicked rebel against God, for they cannot reconcile themselves to the existence of evil" so that "atheism may spring from good motives." Here we begin to see how the Christian revelation illuminates for our author what else would be utterly dark to us. This it does by means of the doctrine of the creation and the fall. But this

doctrine is misrepresented by those who envisage the whole business as "a divine comedy, a play that God plays with himself"—a view which finds in "Calvin's horrible doctrine" that "God has from all eternity predetermined some to eternal salvation and others to eternal damnation," at once its logical conclusion and its *reductio ad absurdum*. This view can, however, M. Berdyaev thinks, be avoided by invoking the suggestion—to be found in Eckhart and in Boehme—of an *Ungrund*, a Divine Nothingness, the source both in God and in man of what he describes as "meonic" freedom, since it belongs to τὸ μὴ ὄν. "Meonic freedom consented," he tells us, "to God's act of creation, non-being freely accepted being. But through it man fell away from the work of God, evil and pain came into the world, and being was mixed with non-being. This is the real tragedy both of the world and of God. God's act of creation could not avert the possibility of evil contained in meonic freedom" and "the myth of the Fall tells of this powerlessness of the creator to avert the evil resulting from freedom which he has not created." Hence "God's second act in relation to the world and to man," wherein he "appears not in the aspect of Creator but of Redeemer and Saviour, in the aspect of the suffering God who takes upon Himself the sins of the world." As the Son, God "descends into non-being, into the abyss of freedom that has degenerated into evil." "He manifests Himself not in power but in sacrifice" so as to "conquer evil meonic freedom by enlightening it from within without forcing it, without depriving the created world of freedom." "Only such an interpretation of the Divine mystery," says M. Berdyaev, "saves ethics from the danger of atheism." Against the Christian God of love and sacrifice "the moral consciousness cannot rise in the name of 'the good' as it does against the abstract monotheistic God who humiliates His creatures, and endows them with freedom in order to make them responsible for the misuse of it and to punish them cruelly."

"The absolute originality of the Christian teaching lies," according to M. Berdyaev, "in the fact that for it the sun rises equally on the evil and on the good, that the first shall be last and the last first, and that the law of righteousness does not necessarily save." The moral life must be interpreted not as conformity to a fixed norm—whether arbitrarily established by the will of God or as, on the other hand, itself binding God's will no less than ours—but as an activity in which man exhibits his freedom by co-operating with God in the creation of the good and the production of new values. Nicolai Hartmann's objection to the admission of a higher purpose realized in nature as being inconsistent with human freedom and morality is equally an objection to his own doctrine of ideal values which man is to realize in the world. Value and purpose are the creations of man and ethics must begin with the question, What is man?—to the consideration of which the third chapter is devoted.

M. Berdyaev follows in his view of man the teaching of his own "Orthodox" Eastern Church. Man is not a natural being, on whom supernatural gifts were first conferred upon him over and above his natural endowment, and then withdrawn in consequence of the Fall; nor has his original nature been totally depraved by that Fall. Originally created as a spiritual being in the image and likeness of God, the Fall dimmed without destroying that image in him, which is revived through the grace received from God through Christ, the New Adam or God-Man. In virtue of his creation in the image of God, he is not merely a creature (though he is that) but himself a creative being, sharing, as he does, in the uncreated "meonic" freedom which, as it also made his Fall possible, "accounts both for evil and for the creation of what never existed before."

"Our conception of man," observes M. Berdyaev, "must be founded upon the conception of personality." His treatment of this conception is especially interesting. It is, he tells us, "the creator and the bearer of super-personal values, and this is the only source of its wholeness, unity, and eternal significance. But this must not be taken to mean that personality has no intrinsic value or is merely a means for super-personal values. It is itself an absolute and exalted value, but it can only exist in virtue of super-personal values." It is thus that personality differs from mere individuality. It is "impossible without love and sacrifice, without passing over to the other, to the friend, to the loved one." It is the image in man of the Christian God, who is not a single person, but a trinity of persons living in mutual love and intercommunion. The individual man has only gradually emerged from the primitive condition—symbolized in the myth of Oedipus, to which Freud attaches so far-reaching a significance—wherein there is "no conscious guilt or responsibility and he is, being not yet fully a *person*, the innocent victim of natural forces, especially of that of kindred." He owes to Christianity his final liberation from the power of these and his endowment with a moral life "independent of the tribe or of any collective unit." It is with some surprise that one finds M. Berdyaev affirming that this independence of kindred and society would be impossible except for a pre-existent soul. He does not, however, mean by this that the soul of the individual has passed through a series of previous incarnations; but that it is not merely a product of the genetic process. This does not seem to him sufficiently secured by the ordinary view of the Latin Schoolmen that it is "created at the moment of conception." He prefers to describe it as "created by God in eternity, in the spiritual world." The "new psychology" of Freud and others, concerned as it is (like the great poets and artists, and like 'thinkers' of the type of Pascal, La Rochefoucauld, Kierkegaard, and Nietzsche) with the study of individual character, is greatly superior in depth and truth to the theories of the associationists and of Wundt, which "assumed that man was a healthy creature, mainly conscious and intellectual, and should be studied from that point of view," since it is recognized that he is, on the contrary, "a sick being with a strong unconscious life." Yet it ignores the soul and so misses the only hope of recovery for man from his sickness, which lies not in the attempt to render conscious "the carefully hidden life of sex," but in the reception from above of redeeming grace which can free man from the lower natural elements and sublimate sex into creative activity in union with God.

The second division of M. Berdyaev's book is entitled "Morality on this side of Good and Evil." "Morality in our world," he says, "implies the dualism of good and evil"; that is, as he also puts it, "dividedness and lack of wholeness." It is "the fundamental paradox of ethics" that "the moral good has a bad origin," which "pursues it like a curse." This paradox is, so M. Berdyaev holds, "brought to light by Christianity, which shows that the good understood as a law is powerless." The ethics of law are "both very human and well adapted to human needs and standards, and extremely inhuman and pitiless towards the human personality, its individual destiny and intimate life." "Throughout history man has been cruel in virtue of moral emotions and from a sense of duty." Indeed, "when he loses the instinct of cruelty, he often loses at the same time moral emotions and the sense of duty." Legal morality, "developed at a time when the community completely suppressed the individual, goes on tormenting him even after the personal conscience has awakened and the centre of moral gravity has been transferred to it." The law, however, "is necessary for the sinful world and cannot be simply cancelled." For, though "it does not know the concrete, unique, living

personality or penetrate into its inner life," it "preserves that personality from interference and violence on the part of others: The ethics of redemption or grace cannot take the place of the ethics of law; where this is attempted (as in medieval theocracy or—in a sense—in Communism) we have despotism and the denial of freedom. It is freedom, not happiness, creativeness, not satisfaction, that man instinctively prefers and aims at. Between freedom and happiness there is an irreconcilable conflict: and the profounder insight of Dostoievsky, Nietzsche, and Kierkegaard, followed by the "new" psychology, has made it impossible to be contented not only with hedonism, but even with the Aristotelian endaemonism of St. Thomas and his followers.

Christianity, which supersedes—or at least supplements—the ethics of law by the ethics of redemption, "is founded," M. Berdyaev tells us, "not upon the abstract and impotent idea of the good, which in relation to man inevitably appears as a norm and a law, but upon a living Being, a Personality, and man's personal relation to God and his neighbours." For these ethics "you must act so that the principle of your action could become an universal law; you must always act individually and everyone must act differently." Hence Christianity (according to M. Berdyaev) "does not allow a sharp division of mankind into two halves, the 'good' who are going to heaven and the 'wicked' who are going to hell." One would like to ask him what he would say of the parables of the sheep and the goats, of the wheat and the tares. But no doubt it is in its proclamation of the equality of God's dealings with the just and the unjust alike, and of the precedence of the publican and harlots over the self-righteous Pharisee, that the distinctive quality of the moral teaching of the Gospel is to be found. When M. Berdyaev wishes to contrast this with the demand that we should love "the far off," he insists that it is one's actual neighbour whom the Christian is bidden to love as himself; but he does not seem to recognize any need to reconcile this characteristic of Christian ethics with that of which he goes on to remind us, the claim that one's nearest should be even "hated" if love for them hinder the seeking of the kingdom of God. He is convinced that this kingdom is "not of this world"; that it cannot be expressed by family or state or "any social or historical form" of common life. The agelong attempt to fit it into such forms is never successful. The Gospel liberates man and leaves it to himself "to find a creative solution of the problems that continually confront him."

Thus we come to the "ethics of creativeness." Man cannot create "out of nothing" like God. His material "is borrowed from the world created by God." Creativeness is reminiscent of the vocation of unfallen man, but "since human nature is sinful, creativeness is distorted and perverted by sin, and may be evil." "It opens the way," however, "to a pure, disinterested morality," —for even when it is evil, creativeness is disinterested—a morality whose "motive is not fear of punishment and of hell, but selfless and disinterested love of God and of the divine in life, of truth and perfection and all positive values." This creative morality "affirms the value of the unique and individual." Passions which, if sinful, "torture man and distort his life" are "the material which may be transformed into a higher qualitative content of life." Creativeness is connected with the energy of sex, to which it imparts a spiritual direction. Ethics must henceforth take account of three objects of human striving which in the present age "are acquiring an unprecedented significance." These three are *freedom*, *compassion*, and *creativeness*.

A long and interesting chapter, dealing with "concrete problems of ethics," concludes the second division of the work. It is pointed out that "my life is determined not only by the love for living beings, but also by the love for values—truth, beauty, righteousness—and these two kinds of love may come

into conflict. The conflict is so real and so poignant that it is equally revolting when personal love is sacrificed to the love of truth and righteousness, and when truth and righteousness are sacrificed to personal love." "When love of goodness and of ideas"—though they be the ideas of God, of humanity, of righteousness—"becomes abstract and fanatical, all is lost and nothing but evil comes of it." "We must love not only the divine in man, only the truth, goodness and beauty in him, i.e. only the valuable content of personality; we must love the human as well, be merciful to this actual human being, love him for nothing. And yet human personality exists only because it has a valuable content, because there is something divine in it, because it is the image of God in man." M. Berdyaev's discussions of the state, of war, of nationalism, of capital punishment, of revolution, of communism, of socialism, of sex, of marriage, of love are full of deep thought and acute insight. His leading conviction is that personality is "the supreme moral value" and yet "does not exist apart from the super-personal and the universal, apart from the value of the idea of which it is the bearer." This idea is the "divine principle, the image and likeness of God." But "this does not in the least imply that the human is a means for the divine. For God the human personality is an end in itself, a friend from whom He expects responsive love and creative achievement. For man God is the final end, the object of his love, the One for Whose sake he performs creative acts. The paradox of the relation between the personal and the super-personal . . . is solved by the religion of the God-man, by the idea of the divinely human love—the only idea which does not destroy personality."

"Ethics," for M. Berdyaev, "must have an eschatological part, dealing with the problem of death and immortality, of hell and of the Kingdom of God." To this the third part of the book before us is devoted. As regards death, "Plato," according to our author, "was right in teaching that philosophy was the practice of death." But his "philosophic doctrine of" natural "immortality does not show the way" to the conquest of death; for "it ignores the fact of death and denies the tragedy of it." Neither does the idealism which "affirms the immortality of the impersonal or the super-personal spirit, of the idea and value, but not of the person." "If there were no death in our world"—if life in our world continued for ever—"life would be meaningless." Life is a continual "partial dying of the human body and the human soul. Death within life is due to the impossibility of embracing the fullness of being, either in time or in space." "The higher and more complex a being is, the more it is threatened with death. Mountains live longer than men, although their life is less complex and lower in quality; Mont Blanc appears to be more immortal than a saint or a genius. Things are comparatively more stable than living beings." The solution of the riddle thus propounded is that death is a necessary part of life, yet is not, as it appears to be, final. This is the teaching of Christianity. "The whole life of this world must be made to pass through death and crucifixion, else it cannot attain resurrection and eternity." "The death of the least and most miserable creature is unendurable, and if it is irremediable the world cannot be accepted or justified. All and everything must be raised to eternal life." "Life seems to conquer death through birth. But the victory of birth after death has nothing to do with personality, with its faith and its hopes; it is concerned with life of the race only." "The Stoic or the Buddhist attitude to death shows impotence in the face of it, but it is nobler than the naturalistic theories which completely ignore death." It is "Christianity alone" that "knows victory over death" from the point of view of personality.

It is, however, by no means here that "faith in immortality is always

comforting." "It is also a source of sorrow and of an overwhelming responsibility." While unbelievers in it can "comfort themselves with the thought that in eternity there will be no judgment of meaning over their meaningless lives." "Modern rejection of hell makes life too easy, superficial, and irresponsible. But a belief in hell makes moral and spiritual life meaningless, for then the whole of it is lived under torture." "From the *objective* point of view, from the point of view of God, there cannot be any hell. To admit hell would be to deny God." But from "the *subjective* point of view, the point of view of man," hell is "given in human experience." It is "a nightmare which cannot be eternal, but is experienced by man as endless." Origen's denial of an endless hell for any creature in contrast with Calvin's doctrine of its predetermination by God in creation is a fundamental antinomy. "Human freedom is irreconcilable with a compulsory, predetermined salvation, but that same freedom rebels against the idea of hell as a predetermined doom. We cannot deny hell, because this would be contrary to freedom, and we cannot admit it because freedom rises against it." M. Berdyaev is clear that a fully developed moral consciousness must admit the existence of hell. "Moral consciousness began with God's question, 'Cain, where is thy brother Abel?' It will end with another question on the part of God, 'Abel, where is thy brother Cain?' There was a time when the intimidating idea of hell retained the herd-man within the Church; but now this idea can only hinder people from entering the Church." "The idea of everlasting torments in hell is a nightmare, and so is the idea of endless reincarnations, of the disappearance of personality, in the divine being, and even the idea of inevitable universal salvation," for which there is not even any subjective hell to be vanquished. Yet "we can and must believe . . . that the final word belongs to God." "Even if the knowledge that there shall be no hell is withheld from me, I do know . . . that there ought to be no hell, and that I must do my utmost to save and free everyone from it." "Heaven, conceived as a correlation to hell," is no more real than hell itself." "It would be poisoned by the proximity of hell with the everlasting torments of the wicked." But it is an error to suppose that the morality which transcends the opposition of good and evil must "imply indifference to good and evil or toleration of evil." On the contrary," a morality based upon relegating the wicked to hell is a minimum and not a maximum morality; it renounces victory over evil, it gives up the idea of enlightening and liberating the wicked; it confines itself to distinctions and valuations and does not lead to any actual change and transfiguration of reality." M. Berdyaev supposes that "crucifixion, pain and tragedy will go on in the world until all mankind and the whole world are saved, transfigured, and regenerated. And if it cannot be attained in our world-aeon, there will be other aeons in which the work of salvation and transfiguration will be continued." "We must recognize both that evil is meaningless and that it has meaning." "The positive meaning of evil lies in the fact that it is a trial of freedom and that freedom, the highest quality of the creative, presupposes the possibility of evil." "The final lesson of ethics is 'Act as though you could hear the Divine call to participate through free and creative activity in the Divine work; cultivate in yourself a pure and original conscience, discipline your personality, struggle with evil in yourself and around you—not in order to relegate the wicked to hell and create a kingdom of evil, but to conquer evil and to further a creative regeneration of the wicked.' "

This account of the contents of M. Berdyaev's book will sufficiently convince the readers of *Philosophy* that it is the production of a highly original thinker of great intellectual courage and remarkable insight into what an English poet has called "the abysmal depths of personality." They will be less

assured that its author is a consistent reasoner and that he has always resisted the temptation of passing lightly over difficulties, too close an attention to which might impede the flight of his speculative genius. But they will, I hope, have aroused in them the desire to ascertain by first-hand study of his work whether or no his present reviewer has done him an injustice by the suggestions of the last sentence. It may be added that there are not a few incidental criticisms, at once sympathetic and penetrating, of contemporary thinkers—notably of Nicolai Hartmann; and a word of praise is due to the English of Mme. Duddington's translation. On p. 25 *n.* for *arbiterio* read *arbitrio*; p. 43, for "incompatable" "incompatible"; p. 250, for "apaphatic," "apophatic."

C. C. J. Webb.

John Locke. By R. I. Aaron. (London: Oxford University Press, Humphrey Milford. 1937. Pp. ix + 328. Price 12s. 6d.)

This book, the most recent publication in the Leaders of Philosophy series, will undoubtedly take its place with Gibson, *Locke's Theory of Knowledge*, as one of the two standard English text-books on Locke. It is a most scholarly piece of work, and the well-balanced judiciousness and care with which it has been carried out almost leave a reviewer unemployed through lack of objects of criticism. In view of its clearness and thoroughness, combined with a discretion which has prevented the sacrifice of space on unimportant minutiae, the book should be specially useful for honours students at our universities, but on the one hand professional philosophers and on the other hand amateurs interested in Locke could also benefit a great deal from the perusal of it. The type of reader to whom it could not be recommended is the one who wishes to acquire knowledge of Locke without reading the latter's work, i.e. it could not well be used to serve as an easy substitute for the reading of the *Essay* itself.

The work falls into three divisions—an account of Locke's life, a commentary on the *Essay concerning Human Understanding*, and a summary of his work on other subjects. The second part, however, includes nearly two-thirds of the book. The author seems sympathetic towards Locke's views except on a few points, such as his tendency to representationism, and holds a middle position between the interpretation of him as the empiricist who set out on the downward path which ended in the "awful example" of Hume and the view according to which he was at least as much a rationalist as an empiricist or even more so. I should myself be inclined to say that he emphasizes the rationalist element in Locke too little, e.g. I cannot see any evidence for the view that Locke was even inclined to a regularity theory of causation and was hovering between it and some other view. His complaint that we cannot see the logical connection between cause and effect itself implies that there is one to be seen. I think that rather more emphasis should have been laid on Locke's view that *a priori* knowledge is the discernment of a connection between our ideas in book iv as an anticipation of the modern doctrine that all *a priori* propositions are hypothetical. It is interesting to note that Professor Aaron is inclined to return to the view that Locke's attack on innate ideas was aimed primarily at Descartes and his followers.

The third part starts by discussing Locke's very incomplete ethics. In dealing with the contradiction between his hedonism and his rationalism, Professor Aaron makes the interesting suggestion that the logical outcome of his teaching is that what is good can be seen *a priori*, but God has arranged

that it should be followed by pleasure so as to persuade men to do what is good. It is here also that the account of Locke's theory of freedom is given, though it belongs to the *Essay*. Then follow his political, educational, and theological theories. The last two in particular surprise by their modernity and must have shocked contemporaries greatly, so that they are by no means compatible with the common view of Locke as a rather timid exponent of the general views already current in his time. He was a strong opponent of blows in education except in the last extremity, and thought that a method which did not use punishment could prevail with most children, and in theology he thought that the only belief necessary for salvation was the acceptance of Christ, meaning by this Christ's view of God as "merciful." In his political philosophy he is more in accord with the views of his time, in England at least after 1688, but his reply to Hobbes gains a topical interest as an answer to the form which the totalitarian theory took in that day. As in politics, so throughout we find in Locke "that balanced and tolerant attitude to life which characterized late seventeenth-century England at its best," and there are few people who will lay down Professor Aaron's book without feeling that Locke is a greater thinker than they thought when they began.

A. C. EWING.

Plato's Conception of Philosophy. By H. GAUSS, Ph.D., Lecturer in Philosophy at the University of Basle. (London: Macmillan and Co. 1937. Pp. xxii + 272. Price 6s. net.)

This book by a Swiss scholar, sponsored in a *Foreword* by Professor Taylor, forms the first of a projected series of "Studies on Plato and Platonism," destined to cover an examination (*a*) of the First Principles of Platonism, and (*b*) of Plato's logic, ethics, and social philosophy. What clearly differentiates the author's aim from the multitude of works on Platonic exegesis is his appeal to the general reader, his avowed desire to combat the prevalent Irrationalism of the present age, and, above all, his wide outlook over the history of Platonism as a dominant influence on the thought and life of more than two thousand years. Already in this opening volume Dr. Gauss gives evidence of the breadth and soundness of his scholarship; witness his frequent references to Plotinus and Proclus, as also (he is by profession an Anglican) to the Platonic factors in Christian philosophy. It is this wide reference that lends special interest to the present volume. He asks the question, What did Philosophy mean for Plato? The answer, of course, is "a way of life." Dr. Gauss takes his start from Windelband's fourfold grouping of types of philosophy as displayed in history, and considers successively whether Plato's conception can be regarded as a branch of (1) natural (i.e. scientific) Philosophy, (2) the art of practical life, (3) the handmaid of theological dogma, (4) the critical examination of reason (chs. 1–4.) He concludes that while Plato's philosophy has something in common with all these, it cannot be included under any of them. The last three chapters (5–7, esp. ch. 5) are devoted to a positive exposition of the Platonic "way of life."

The book, though the work of a foreign scholar, is written in admirable English. Though the author makes no attempt to disguise his personal adhesion to the Christian-Platonic tradition, his exposition throughout is scholarly and scrupulously fair. He has the courage of his convictions as an interpreter, as (e.g.) when he refuses to follow Burnet and Taylor in distinguishing the

Form of Good from God. This decision will doubtless be defended in more detail in a later volume of the series. Chapter 4 contains an excellent survey of Kant's critical philosophy, in relation to its antecedents and issues. Dr. Gauss succeeds in presenting its main principles and the objections to them in language understandable by the general reader. In discussing the religious element in Plato's philosophy (ch. 3), he fails to stress what, in our opinion, is the chief difference between Plato and Christian thought, viz. that for the latter the Judaic-Christian doctrine of Creation *ex nihilo* is fundamental. Plato's Demiurge is an Artificer, not a Creator. Or if, as for Dr. Gauss, God and the Form of Good are one, emanation rather than creation is the term that would apply to its unilateral causality. Our chief criticism on the more constructive chapters (5–7) is that in insisting (rightly) on the inseparability in Plato of philosophy and life, Dr. Gauss does not mark with a firm enough hand the dependence of *praxis* upon *theoria*. The Irrationalism of to-day which he is so anxious to remedy is due largely to a reversal of this relation. Plato (and Christianity) championed the primacy of Mary; the modern world has plumped for Martha. Dr. Gauss is no Pragmatist, and wards off any such crude interpretation of Plato. But he hardly throws into strong enough relief Plato's insistence on knowledge and contemplative vision as at once the goal and the inspiration of the good life. "In Plato thought and action are always co-ordinated, not the one made subservient to the other" (77). This is surely not the case. Dr. Gauss is led by this error both to depreciate the significance of ἐπιστήμη in Plato's philosophy, and to maintain that the Form of Good was unknowable by the human mind. What about the vision of Absolute Beauty in the Symposium?

We cordially recommend this book to all who are interested in Plato and Platonism, and we look forward to the development of the views here outlined in the succeeding volumes of the series.

W. G. DE BURGH.

Plato To-day. By R. H. S. CROSSMAN. (London: George Allen & Unwin, Ltd. 1937. Pp. 302. Price 7s. 6d.)

This clever and attractive book should be read by all those interested in the relation of Plato's theories to modern problems. They will find it full of stimulating food for thought, especially on these modern problems. But those who wish to acquire, as a desirable preliminary, a fair, accurate, and sympathetic understanding of Plato's point of view will be well advised to read it with a high degree of critical caution.

The book begins with chapters on the historical background, and on the lives and work of Socrates and of Plato up to the second Syracusan journey. This is most attractively written, as is, indeed, the whole of the book, and its main outlines are not open to serious criticism, though there are a number of debatable points of detail. This is followed by a series of chapters in which an attempt is made to say what Plato would have thought about various modern movements and institutions. There are chapters on "Plato looks at British Democracy," at British Education, at the Family, at Communism, and at Fascism.

The whole line of approach here seems to me much more questionable. One may agree fully that the final justification for the study of Plato is to help towards an understanding of our own situation. One may agree, further, that a number of Plato's general ideas, if developed and applied to our own situation, would open up interesting and suggestive lines of thought. But we have to do that for ourselves. I very much doubt whether this simple and

direct method of transplanting Plato bodily, so to speak, into our own times and asking what he would have said about this or that is either possible or profitable, except as an amusing game of pure speculation. In the present case there is often quite as much of Mr. Crossman as of Plato in the reflections, particularly in the way of selection and emphasis. With a rather different emphasis and a different selection I would undertake, had I Mr. Crossman's literary gifts, to present a very different picture with quite as much support from Plato's words.

The book concludes with a long chapter on Why Plato Failed, and a short one on The Modern Plato. Here we have Mr. Crossman at his weakest. The last chapter, indeed, I should frankly dismiss as negligible as far as the understanding of Plato goes, though as a hit at some of Mr. Crossman's senior colleagues it makes good reading. But the chapter on why Plato failed is really the culmination of the argument, and deserves a slightly fuller treatment.

Part of the case for Plato's alleged failure is based on the results of the Syracusan experiment. But very little can really be deduced from this. It is certain that Plato would never have admitted that the conditions at Syracuse made any fair test of his ideas possible. Nor, in fact, did they. For nothing that happened at Syracuse could be intelligibly described as an application of Plato's theories to practice. Nor, in any case, could one single instance prove very much either way. There appear to have been a number of cases in which Plato's pupils played a much more successful part in the affairs of their cities than Dion did. Unfortunately we know very little about these. But they are obviously just as important for deciding how Plato's teaching would work in practice as the very special case of Syracuse. In any case, a much more careful analysis would have to be given than Mr. Crossman gives us of the nature and the causes of the failure for any conclusion to be drawn.

It is a great mistake to see the Syracusan episode out of proportion because we happen to know comparatively so much about it. Its personal interest is no doubt great. But its bearing on Plato's theories is slight. There is a further point in that connection in which Mr. Crossman seems to me to go astray. He speaks of the changes or modifications in Plato's views in his later years, and appears to base his conclusions on this point on very conjectural inferences from what happened in connection with Syracuse. He ignores the much more important direct evidence that can be derived from the *Politicus* and the *Laws*. The omission of practically all mention of these two dialogues seems to me a great defect in a book that claims to be something more than a mere study of the *Republic*. Incidentally, this might have saved Mr. Crossman from making the quite baseless statement that Plato "in his later years had turned more and more to pure philosophical speculation." In fact, in the writings of these later years a far greater proportion is given to political discussion than at any other period. And there is no evidence to set against this.

The other main criticism of Plato is based on his alleged bias in favour of his own social class. He held, we are told, that his "potential rulers will mostly be found not among the peasants and artisans, but in the ranks of the gentry." And as a consequence his advocacy of an ideal aristocracy became in practice an advocacy of the claims of the existing aristocratic parties.

On the first point, I can find no evidence that Plato actually did hold this. He may have done so. It may even have been true. But that is a question of fact which has no relevance to the truth or falsehood of his fundamental position. Even if he did hold it and was wrong, the most that that could be

said to show would be that his social prejudices prevented him from applying consistently his own principles. But the value of the principles should be discussed without reference to this. Nor can I find any evidence that Plato's theories became in fact, either for himself or his pupils, an advocacy of the claims of existing aristocratic parties. His pupils, such as Euphraeus and Lycurgus (if he really was a pupil of Plato's), seem to have worked as readily with the democratic parties as with their opponents.

I hope I am not being unfair to Mr. Crossman. But the impression he makes on me is that he is so disturbed (unnecessarily, as I should think) by the difficulty of meeting Plato's arguments that he is trying to counter them by creating prejudice against Plato on what are really irrelevant issues. This might account for the occasional introduction of depreciatory remarks (such as that Plato was ignorant of human nature) without any evidence and in apparent contradiction to what he himself says elsewhere (as when he describes Plato's view of human nature as "grimly realistic"). This is a pity, because it leads him to neglect much more fundamental points which call for discussion. He introduces one such himself right at the end of the chapter, when he raises the question of the nature of scientific knowledge, and compares it with the kind of knowledge that Plato's arguments assume to be possible. This is a really central point, and deserves much less perfunctory treatment than he gives it.

In my judgment the chief benefit that we derive in thinking about our own problems from a study of past thinkers lies in the stimulus it gives to analysis of the different elements involved and distinction of what is peculiar to one situation from the factors of more universal application. And Mr. Crossman's impatience to get on too quickly to direct application to our own situation seems to me likely to sacrifice this benefit. I should be the last to advocate a merely antiquarian treatment of Plato. But I think we ought to be able for the moment to detach ourselves from our own immediate interests and associations, and sink ourselves in his before we can learn anything of value from him. The tendency to think all the time of contemporary problems and to interpret Plato too much in terms of these leads to serious misunderstanding of him. Thus Mr. Crossman's equation of Plato's "noble lies" with propaganda as practised by modern dictators, while it has a core of truth, is really quite misleading if taken literally. Mr. Crossman's own views on contemporary problems are certainly stimulating and often illuminating, and it may well be that our time could be more profitably spent in discussing these than in trying to understand Plato. But it would be a pity that we should think we are doing the one while we are really doing the other.

G. C. Field.

Plato's Cosmology. By F. M. Cornford. (London: Kegan Paul, Trench, Trubner & Co. 1937. Pp. xviii+376. Price 16s.)

This invaluable work is a translation, with running commentary, of the *Timaeus*, on the same pattern as the study of the *Sophist* and *Theaetetus* which Professor Cornford has already given us. It naturally challenges comparison with the great work of Professor Taylor, and one can only say that it fills a place that that work did not fill. It does not display the vast erudition in matters of detail of Professor Taylor's work, as can be seen from the fact that it gives under four hundred pages to translation and commentary combined, while Professor Taylor gave nearly seven hundred to notes and commentary alone. But that makes it much more manageable for any except

the most advanced specialist. Further, Professor Taylor's great fertility in speculation led him in this case to put forward certain views, fundamental to the interpretation of the whole dialogue, which have seemed quite inacceptable and even fantastic to practically all other scholars. There was, therefore, urgent need for a commentary representing a more central and balanced interpretation. And this the present work supplies admirably. Its great learning, sound judgment, and attractive style make it sure of a welcome from all interested in the understanding of Plato.

It is naturally largely concerned with matters of detail, on which it would be out of place to comment here. But I must just mention the brilliant exegesis of the well-known crux, *τῶν ἀϊδιων θεῶν γεγονὸς ἄγαλμα*, which seems to me finally to dispose of the difficulties that have been found in the passage. On the larger questions Professor Cornford's general methods of interpretation seem to me admirable, and he is always reasonable and persuasive. But, as is only natural, I find some of his views more convincing than others.

Thus, for instance, I find the account of the significance of the Demiurge and his relation to the Forms, the discussion of the meaning of Necessity and of the status of scientific knowledge wholly sound and very illuminating. I find less light on the difficult question of the relation of the Demiurge to the Soul of the World. It seems to me necessary to regard them as really identical, and only distinguished for the purposes of the myth. But there is no definite pronouncement on this point by Professor Cornford. Nor is as much light as I should like thrown on the problem of the exact sense in which we can speak of the creation of individual souls on Plato's view.

On one or two points I should feel inclined to challenge Professor Cornford's interpretation. Thus, I believe that there is a very real sense in which it is true to say that Plato regarded space as the matter out of which the physical universe was made. There seem to me to be too many passages which imply this to be ignored. This is partly, no doubt, a matter of terminology. But not, I think, entirely. Partly as a result of his view on this point Professor Cornford holds that we must ascribe to Plato the belief in an irrational element in the World-Soul. This is an interesting suggestion which one would like to see further developed, but, at first sight at any rate, I fail to find it convincing. I think it is arguable that Plato ought to have held this, but I can find no convincing reason for believing that he actually did.

All these points, however, are questions on which difference of opinion will always be possible. And Professor Cornford is always so careful and reasonable in his views that we can learn as much from him when we differ as when we agree.

G. C. Field.

Philosophical Fragments, or A Fragment of Philosophy. By Johannes Climacus; responsible for publication, S. Kierkegaard: translated from the Danish with Introduction and Notes by David F. Swenson, Professor of Philosophy at the University of Minnesota. (London, Oxford University Press; New York: American-Scandinavian Foundation. 1936. Pp. xxx + 105. Price 7s. 6d.)

Søren Kierkegaard. By Theodor Haecker. Translated and with a biographical note by Alexander Dru. (London: Oxford University Press, Humphrey Milford. 1937. Pp. 67. Price 2s. 6d.)

These two books should be commended to readers of Philosophy by someone with a knowledge of Kierkegaard more extensive and less second hand

than any which the present reviewer can claim. There is no doubt that the former is a work of very great interest in itself to all who appreciate the significance for the religious thought of the present time of an isolated man of genius, who not only rebelled against the dominant intellectual fashions of his own day, but wrote in a tongue acquaintance with which was rare among scholars outside of Scandinavia: while the other, contains a useful account of the same remarkable person and of his teaching, with some suggestive criticism of his views.

It was, it seems, the humour of Kierkegaard to publish his thoughts to the world under fictitious names, representing himself as only their introducer to the public. Thus the *Filosofiske Smuler, Philosophical Crumbs* or *Fragments,* were ascribed to Johannes Climacus, whose designation, borrowed from an ascetic writer of the sixth century, seems to be intended to hint that in the book attributed to his pen the true author is rather climbing upwards towards his final purpose than as yet in actual occupation of it.

The problem with which these *Fragments* are concerned is thus stated on the title page: "Is an historical point of departure possible for an eternal consciousness? How can such a point of departure have any other than a mere historical interest? Is it possible to base an eternal happiness upon historical knowledge?" It is obvious that this is a question of the first importance for Christian theology. "For," as Kierkegaard himself observes in the course of this very book (p. 92), "it is well known that Christianity is the only historical phenomenon which, in spite of the historical, nay precisely by means of the historical, has offered itself to the individual as a point of departure for his eternal consciousness, has assumed to interest him in another sense than the merely historical, has proposed to base his eternal happiness on his relationship to something historical."

The following quotations will perhaps sufficiently indicate the contribution made by Kierkegaard in the treatise before us to the solution of the question which he has propounded in these terms.

"A simple historical fact is not absolute, and has no power to force an absolute decision. But neither may the historical aspect of our fact be eliminated, for them we have only an eternal fact. Now just as the historical gives occasion for the contemporary to become a disciple, but only it must be noted through receiving the condition from God Himself, since otherwise we speak Socratically" (this expression will shortly be explained), "so the testimony of contemporaries gives occasion for each successor to become a disciple, but only, it must be noted, through receiving the condition from God Himself" (p. 84). (The expression "speak Socratically" refers to Kierkegaard's view—expressed on p. 6 of this book—that for Socrates "every point of departure in time is *eo ipso* accidental, an occasion, a vanishing moment.")

Again: "There is not and never can be a disciple at second hand; for the believer—and he alone is a disciple—is always in possession of the autopsy of faith; he does not see through the eyes of another, and he sees only what every believer sees—with the eyes of faith" (pp. 85, 86).

Yet again: "If the contemporary generation had left nothing behind them but these words: 'We have believed that in such and such a year God appeared among us in the humble figure of a servant, that He lived and taught in our community, and finally died,' it would be more than enough. . . . The testimony of the contemporary provides an occasion for the successor, just as the immediate contemporaneity provides an occasion for the contemporary" (pp. 87, 88).

And, once more: "There is no disciple at second hand. The first and the ast are essentially on the same plane, only that a later generation finds its

occasion in the testimony of a contemporary generation, while the contemporary generation finds this occasion in its own immediate contemporaneity, and in so far owes nothing to any other generation. But this immediate contemporaneity is merely an occasion, which can scarcely be expressed more emphatically than in the proposition that the disciple, if he understood himself, must wish that the immediate contemporaneity should cease, by God's having the earth" (p. 88). (The reference in the last sentence is, of course, to John xvi. 7.)

Written in 1843, in the heyday of the dominance of the Hegelian philosophy in the schools of Germany and of the lands which looked to Germany for philosophical leadership, the book before us contains many digs at the ruling system, to its birth under the shadow of which, however, Kierkegaard's own philosophy doubtless owed in the main its own markedly "dialectical" character. Even the representation of Christianity as essentially a "paradox," and so necessarily an offence to reason, demanding for its acceptance not reason but faith, while put forward in opposition to the tendency of the theology associated with post-Kantian idealism to minimize the significance of Christianity as a unique revelation of God in history, bears upon itself the unmistakable stamp of the type of thought against which it expresses a reaction. But it is none the less of great importance for the understanding of Christianity that it should be presented not only as an unveiling of the eternal nature of God in which the historical circumstances attending the revelation have only a transitory value, symbolical or illustrative, but as something without parallel or possible substitute, an Incarnation unprecedented and unrepeatable. Mr. Haecker, who is himself evidently a Roman Catholic, while emphasizing the genuine service rendered to Christian theology by Kierkegaard in his insistence on the singularity of Christian experience, points out that his presentation of Christianity in the *Philosophical Fragments* suffers from its detachment, for all the stress laid by him on historical reality, from the actual historical context afforded by Church and Sacraments; and this not only as that context appears in Roman Catholicism; for, in his recoil from the compromise with the world to which the State Church of his own country seemed to him to be committed, Kierkegaard refused on his deathbed to receive the communion from those who were to him only "the king's officials." In the *Philosophical Fragments* again, as Mr. Haecker points out, the manifestation of God in time which is the special object of Christian faith is apparently regarded as not merely paradoxical, but as catastrophic—somewhat after the fashion of Marcion—and here the line of thought represented by Karl Barth in the present generation seems inclined to follow Kierkegaard.

Professor Swenson's translation occasionally—especially in the earlier pages of the *Philosophical Fragments*—offers sentences which can scarcely be called intelligible English (e.g., on p. 8, "the Socratic self-denial to think its nothingness"), but on the whole reads well; and he deserves the gratitude of English-speaking readers for making this thought-provoking book available to them in their own language.

C. C. J. Webb.

The Philosophical Bases of Theism. By G. Dawes Hicks, M.A., Ph.D., Litt.D., Fellow of the British Academy and Emeritus Professor of Philosophy in the University of London. (London: George Allen & Unwin, Ltd. 1937. Pp. 272. Price 8s. 6d. net.)

In a generation whereof some of the most distinguished theologians, in their desire to emphasize the uniqueness of the Christian revelation, refuse

to leave room in their defence of a religious view of the world for a *natural* theology, the reassertion in these lucid and weighty Hibbert Lectures, by a thinker of Professor Dawes Hicks's competence and distinction, of the "philosophical bases" of the belief in God as a supreme living, intelligent, and personal Being, the source of the order, beauty, and goodness to be found in nature and of the minds which apprehend these, is timely and welcome. The arguments urged in support of such a belief are none the worse for being familiar, and they are, as one would expect from the writer, so stated as to exhibit their strength in view of the objections most often brought against them by representatives of the science and thought of to-day. It is, however, to be noted that, as Prof. Dawes Hicks points out in his Preface, the problem of evil is left on one side and reserved for future treatment; while nothing is said about the problem, so intimately associated with the tradition of natural theology and with the acceptance of such a theism as is here maintained, of human immortality: for his judgment of this question we are referred to other works of our author already in print.

Professor Dawes Hicks holds that the distinctive feature of the kind of thinking which we distinguish as "philosophical" from that which we call "scientific" is that "all parts of what we take to be reality are contemplated as having a common relation to the thoughts and interests of the human conscious subject." The work of philosophy lies in the critical examination of human experience, and its "ultimate task" is "to frame a coherent representation of reality as a whole which will enable us to connect together consistently and harmoniously the several facts and aspects of our total experience." It cannot therefore ignore a feature of human life which have had throughout the whole course of man's history so far-reaching an influence on his experience as religion. Everything goes to show that religion is "a normal and universal expression of human nature" and that it is closely associated with what are generally admitted to be its greatest achievements. It is thus obviously the function of philosophy critically to examine religious experience, as it is the duty of those who set store by it to submit it to such free and open inquiry as alone can justify its pretensions to be genuine knowledge. For Prof. Dawes Hicks this inquiry must be concentrated on what he finds to be "the central affirmation of the religious consciousness, at least in modern times," namely, "the assurance of a conscious relation" of human minds "to a supreme Mind transcending the whole family of dependent minds."

If philosophy is what Professor Dawes Hicks has defined it as being, it must necessarily be in a sense "anthropomorphic"; and his second Lecture, which he calls, borrowing the title of a work by Thomas Huxley, "Man's Place in Nature," discriminates true from false anthropomorphism, and contends that the importance of the spiritual qualities by which man, and man alone among the natural objects within our knowledge, is distinguished, being "absolutely incommensurable with material magnitude," is in no way reduced by the consideration of the contrast between man's material insignificance and the immensity of the universe contemplated by astronomical science. We are invited to "acknowledge with Lotze how absolutely widespread is the *extent* of the mechanism" and "how perfectly subordinate is the *significance* of the function which mechanism has to fulfil in the structure of the world." The unsatisfactoriness of the explanations offered by scientific naturalism of our sense either of beauty or of moral obligation is once more exposed; and the attempt of Positivism to supply in "humanity" an adequate object for the religious sentiment is acutely examined and dismissed.

Of the traditional arguments for the existence of God Professor Dawes

Hicks regards the Cosmological Argument—which he restates in a form similar to that suggested by Professor Taylor in his "Vindication of Religion" in *Essays, Catholic and Critical*—as successful in establishing the conclusion that "the realm of nature is not the whole of Reality, that the existence of nature being contingent existence is dependent upon a mode of Being that is not contingent but necessary." Yet, since in itself it "throws no light upon the character of this absolutely necessary Being, it prepares the way for theism, but does not, in itself, entitle us to assert that the self-explanatory ground of nature is a conscious Mind or Personality." This can, however, be made probable by the Teleological Argument, which is not merely speculative, but takes as its starting point the examination of "the various facts and aspects of nature, inclusive of man, that fall within the sphere of our observation, and by detecting, if we can, the indications they afford of the kind of reality upon which they depend." Finally, the argument from the beauty discovered in nature (and in this connection Professor Dawes Hicks's reference to Mr. Shebbeare's striking and too little known treatment of this subject is to be noted) and the argument from the character of our moral ideals are shown to support the conclusion to which the "adaptations" in nature were found to point.

Professor Dawes Hicks's treatment of these themes, while following, as has already been said, familiar lines, is forcible and persuasive. But the examination of religious experience, which occupies the third and fourth Lectures, is less satisfactory. Much that is valuable is, indeed, to be found there. I would instance the decided refusal to depreciate or minimize the part played by reason in religion; the endorsement of Cook Wilson's insistence on the importance of the sentiment of reverence as the distinctively religious emotion (though perhaps less weight is given than it deserves to the Oxford philosopher's argument thence to the validity of the conception which it implies); and the account of the relation of "faith" and "knowledge." But it is difficult not to feel that the problem of religious experience is unduly simplified for our author by his obvious lack of sympathy with the mystical type of religion. One may indeed agree with him that the "immediacy" of certain experiences is sometimes dwelt upon without sufficient discrimination of an "immediacy" which is *above* and an "immediacy" which is *below* the level of rational mediation; or again that some writers are apt to confound under the same name of "mystical" widely different types of religious experience to some of which the name is very doubtfully applicable. But one may notwithstanding suspect that the turn of mind which leads Professor Dawes Hicks to treat as meaningless any language which speaks of the relation of our spirit to the Divine Spirit in terms other than those of such mutual impenetrability as exists between two finite spirits allows him to be too content to regard such terms as wholly adequate to express even the latter relation.

So, too, the concluding Lecture of the course, which deals with the contrast of Pantheism and Theism, would be more valuable if it evinced a fuller recognition of the truth (for such it seems to the present writer) that it is not merely philosophical theory but religious experience itself that leads to dissatisfaction with a "theism" so well satisfied with this doctrine of mutual exclusion that it is never beset by the temptation to pass the line dividing it from "pantheism."

On p. 45, l. 1, for "lonely" read "lowly." At the bottom of p. 148 quotation marks should be substituted for brackets. In reading p. 89 one wonders who ever held the "ecclesiastical doctrine" of the "final authority" of the Thirty-nine Articles.

C. C. J. Webb.

The One Sure Foundation for Democracy. By STANTON COIT, D.Ph. (London: C. A. Watts & Co. 1937. Pp. viii + 55. Price 2s.)

Why is it that a real Democracy, conjoining intelligent authority of the community with individual liberty of self-development, has never been achieved? This is the problem to which Dr. Coit, in his Conway Memorial Lecture, addresses himself with all the wisdom which a long life, devoted to the theory and practical teaching of ethics, has endowed him. Though his ultimate solution for the achievement of Democracy rests upon the right feelings and desires of the peoples as a whole, he does not believe that a people possesses yet a sufficiently trained intellectual and moral insight for this task. There is an evil principle in the animal man which works against the application of that insight of true values which Democracy enjoins. A blind rush of popular power cannot succeed in overthrowing the barriers of class rule and, if it could, the proletarian government it would set up would not fulfil the moral requirements of Democracy. Moral insight, however, as a natural gift of man, needs cultivation in order to play its proper part, and Dr. Coit, who has devoted half a century to this work, records here the results of his experiences. "Man must be brought to the level of moral accountancy by educating and training, by directing his attentions from infancy systematically throughout life to moral values and their infinite importance" (p. 49). Since evil has a more assertive reality than good, this education will be directed chiefly to securing admiration for good conduct by repudiation and hatred of bad conduct. Goodness, peace, security are almost wholly negative conceptions in their first appearance and their positive significance can only be built up by slow degrees. This moral education must begin with the children and adult members of the upper classes, who must be prepared to accept as just and reasonable many radical reforms of those political and economic advantages which they have been brought up to believe as their rightful privileges. But this moral enlightenment must spread among the masses, if Democracy is to be based upon justice, not on force.

It is a powerful plea for the Kantian-Socratic method of spiritual discipline. "When such a method has been practised for a decade by all the religious and educational systems on earth, the present-day obtuseness to the mental and moral influence of social atmosphere will seem more akin to the mentality of brutes than of spiritual agents" (p. 29).

This reasoning will not, of course, seem convincing to Marxists and other economic determinists, who hold that the religious and educational systems are in the main products and supports of those social inequalities which Democracy is called upon to overthrow. To eliminate the brute, who after all has some excellent qualities and aptitudes, and substitute a purely spiritual agent, may not be practicable or even necessary. "To feed the brute," mentally and morally, may be the better policy.

J. A. HOBSON.

Hume's Theory of Knowledge. A Critical Examination. By CONSTANCE MAUND. (London: Macmillan & Co. 1937. Pp. xxi + 310. Price 12s. 6d.)

Mrs. Maund has written a careful and accurate study of Hume's epistemology. By a thorough analysis of each of his main problems she shows its real significance and the strength and weakness of Hume's solution. Where his position is weak she looks carefully for traces of an alternative and sounder view, but she never makes the mistake of improving her author out of recognition, and her criticism is always clear and unequivocal. She adds her quota to the recent revival of Hume by insisting that anyone who thinks of his

philosophy either as mere psychological associationism or as the self-destruction of pure empiricism will miss most of his greatness. She also reinstates the *Enquiry* as a genuine and in some ways improved recasting of his views and not merely a watered-down popularization of the *Treatise*. Her book is written with unrelenting sobriety and sincerity and especially in its early chapters should interest students who wish to concentrate on Hume's permanent significance in philosophy.

Her method and approach suggest one criticism. She speaks of each mental act as having an "accusative," whose analysis is Hume's problem, and she is occasionally inclined to write as if "accusative" were not merely a preliminary description of one aspect of the problem but as if it were the name of the immediate object of the mental act. It is then an object which, because it is immediate, is always apprehended with certainty. For instance on pp. 236, 237 it is suggested that the accusative of any act indubitably exists, and the only problem is "What is its nature and its relation to other accusatives?" This tendency does not, however, damage her treatment of Hume himself, though it would suggest the need of some further clarification of her own views on epistemology.

J. D. Mabbott.

Structure and Reality: A Study of First Principles. By D. W. Gotshalk. (New York: The Dial Press. 1937. Pp. xvi + 292. Price $2.75.)

In this book, deservedly subsidized by the American Council of Learned Societies, the chief metaphysical principles are described in successive chapters upon continuants, events and relation; a discussion on space and time, causality and teleology follows; and the book ends with chapters upon "pluralistic monism" and upon "God and man."

The author is pertinaciously metaphysical, and that is highly to his credit. He writes with great superficial and much genuine clarity. He is well acquainted with contemporary philosophy, but does not make the mistake of regarding the masters of the past as outmoded. The reasonableness of the book's temper and the firm moderation of its tone are altogether admirable.

My frank recognition of these high merits will prevent me, I hope, from being misunderstood if I make certain critical comments. Mr. Gotshalk says of Whitehead, to whom he owes a great deal, that "he appears to lean a bit too much" in such-and-such a direction "to be followed completely." The same thing strikes me about Mr. Gotshalk.

At the very outset I do not find his account of continuants and events at all convincing. Mr. Gotshalk would agree, I suppose, that the problem of change and permanence is not solved at all if we are presented, on the one hand, with unageing "things" and on the other hand with "transitions"; and that is what would happen if a "continuant" were just a name for a non-historical thing or substance and an "event" were just a name for a transition, change, or process. My difficulty regarding Mr. Gotshalk's views about "continuants" is that much that he says about them seems to be of this order, although much of it is not. When he speaks of a continuant as an energy-inheritor, the natural meaning is that it is renewed from moment to moment and inherits just as a continuing flame inherits. In that case, however, a continuant would be what this author calls an "endurance," and he treats an "endurance" as an event. On the other hand, he often calls a continuant a "thing," "material" a "route" (i.e. I suppose a solid and permanent road to travel along). I do not feel comfortable about these two ways of speaking when they are taken together, and I cannot think it is a

matter of "taste and suggestiveness," as Mr. Gotshalk says (p. 51), whether Mr. Whitehead is right in holding that "events are in some sense the ultimate substance of nature." On the contrary, this appears to me to be a primary problem of metaphysics.

I also find Mr. Gotshalk's positive account of relation very difficult (although, negatively, he is an effective critic of several other people). With him "relation" tends to mean "form" or "structure"; and that is a still more general conception implied in the very being both of continuants and of events. And surely he has forgotten his admission that relations are "inter-ingredient" when he says (p. 78) that relation is "the structure present within realities." He also appears to assume uncritically that identity is a relation (e.g. p. 79).

The next triad of chapters give him an opportunity of discussing relativity, the Heisenberg principle, and the like. They are careful particular discussions of particular problems. The central problem of causality, he thinks, is "the existential determination of sequent events and continuant states." By teleology he means primarily selectivity. It is therefore tautological to say that efficient causality is also teleological. For efficient causality is obviously selective.

The last two chapters are short. That on "pluralistic monism" (or "atomistic organicity"?) follow Mr. Morris Cohen rather closely, and the final chapter on "God and man" seems to me to be over-confident. The Whole, Mr. Gotshalk says, does not change, but has being, is infinite, individual, eternal, intelligible, perfect, and free. This Whole is God, and its changelessness is not inconsistent with the previous metaphysic because it is quite usual for a whole to possess properties that its parts do not possess.

That, no doubt, is true. A watch keeps time and its case does not. But it is unusual, to say the least, for a whole to possess no property that its parts possess, e.g. for a watch to have weight when its hands and springs have no weight at all. The Whole, on Mr. Gotshalk's showing (I prefer not to call It "God"), seems to be outside all his categories. It is not a continuant, It is not an event, and I do not see how It can be strictly a relation. An even more serious difficulty, however, is that Mr. Gotshalk appears to hold (like Mr. Whitehead) that events are "indefinite" before they occur. As he says (p. 42), "A change is a transition from indefiniteness to definiteness. Prior to a change, its novel terminus is indefinite, lying in the future. After the change the novelty is definite." But, according to Mr. Gotshalk (p. 262), "on our view Reality [i.e. I suppose the Whole] is definite." This seems to me to be a plain contradiction. The indefiniteness of the future is a metaphysical principle about existence, and cannot be abrogated in the case of the Existence of the Whole.

JOHN LAIRD.

Causation, Freedom, and Determinism: An Attempt to Solve the Causal Problem through a Study of its Origins in Seventeenth-Century Philosophy. By MORTIMER TAUBE, Ph.D. (London: George Allen & Unwin, Ltd. 1936. Pp. 262. Price 10s. net.)

This book confidently takes the tempting line of distinguishing causality altogether from necessitation (or "determinism") and holding in consequence that causality, so far from being irreconcilable with freedom, implies freedom. The argument is complicated, however, by the author's decision to set himself a double task. He is anxious to show that the greater seventeenth-century philosophers agreed with him and that later authors like Hume obscured the

entire question by supplanting the sensible notion of active power with the unintelligible notion of determinism.

This double objective is a little trying to the reader who, even if he finds the thesis attractive and the history quite absorbing, is almost certain to have his attention distracted. Is the history true? Is the thesis sound? Does the history support the thesis? Does it matter whether it does or doesn't? For my part I have enjoyed the book very much indeed; but I doubt both history and thesis.

The history, I think, is a tendencious business. It is compelled, over-frequently, to say, "X unless he was talking nonsense must have meant so-and-so," and much of it, especially in its account of Spinoza, seems to me to consist at least as much of criticism as of exegesis.

The thesis, however, is still more important. The author decides, by a simple appeal to his own experience, that he is free and that he exercises causal power. Therefore his action cannot be fixed in advance, that is to say, determined.

This implies negatively that he knows that some of his actions are not determined; and I agree with Leibniz and (I should say) with Spinoza that no one is entitled to base this alleged piece of knowledge on inspection of himself. We may indeed be ignorant of such determination, if it exists, but how can we *know* that it is absent? This author's contention, however, on its negative side, is still more difficult to establish. By "power" he means spontaneous power. Therefore (he holds) there can be no such thing as derived or caused power. Therefore in his experience of activity he has to hold that he can distinguish between spontaneity and all that is derived, so that he can see quite clearly that no part of his spontaneous causality is derived. And it seems monstrous to make such a claim. On the positive side he argues, very fairly, that he can distinguish between mere succession and his "causal" doings. Thus if a leaf falls while he is pushing his lawn-mower there is succession but no causality on his part with regard to the leaf. This proves a certain connectiveness in causal succession that is absent in mere succession, but cannot prove that "causation" is more than a species of succession.

It is legitimate to say that the "power" we think we are conscious that we exercise need not be uniform—although those who argue so commonly proceed to ask for a "reason" for the variation. On this important point, however, the author contradicts himself flatly. On p. 20 he says that "the concept of active power and the concept of uniformity exclude one another." On p. 123 he says that, "In itself 'a regularity view' of causation does not imply the denial of causal efficacy." At the end of his book he argues (p. 248) that the "general causal influence" of a stable environment is the probable basis of inductive argument and of the prediction of regularity in the future.

Among other points I would mention two. The first is the author's view that omniscient foreknowledge, if it existed, would imply determinism. That was what Hobbes said and Leibniz denied. The author wrongly agrees with Hobbes. For plainly if God were free he might know in advance with complete certainty what he and his universe would do, although it would also be true that God *might* act differently (i.e. would have the "power" to do so) or *might* make his universe act differently.

The second is that this author is capable of palpable misrepresentation. An egregious example is this. He tells us (p. 229) that Moore, on p. 78 of his *Philosophical Studies*, "admits ultimately that he cannot give any meaning to the term 'existence'." Returning to the question in an Appendix, Dr. Taube quotes the said page 78, and the words quoted are, "What is this common

simple sense of the word 'exists'? For my own part it seems to me so simple that it cannot be expressed in other words except those which are recognized as its synonyms. I think we are all perfectly familiar with its meaning." It is open to Dr. Taube to say that Moore's "common simple meaning" is *not* a meaning. It is utterly false to say that Moore *admits* that the term has no meaning.

To readers of this book I think I can promise great interest, considerable profit, and little or no conviction.

JOHN LAIRD.

Types of Aesthetic Judgment. By E. M. BARTLETT, Ph.D. (London: George Allen & Unwin, Ltd. 1937. Pp. 241. Price 7s. 6d.)

The publication of Miss Bartlett's thesis for her Doctorate will enable many students of aesthetics to profit from her clear and painstaking treatment of some of its outstanding problems; her readers will be grateful to those who made publication possible. Her study is methodological in conception, being aimed at ascertaining the correct method whereby the problems of aesthetics may be solved rather than at the working out of any new theory. In her first chapter she rightly dismisses the metaphysical method as importing prejudice into the inquiry, and only allows the metaphysical question to be raised *after* the spade-work of impartial analysis is over. Her next chapter shows equally conclusively that neither psychological theories founded on the mental reactions of the subject nor objective theories based on material objects in art or nature can claim to cover all the facts of aesthetic experience. Aesthetics must take account of features belonging to both the inside and the outside worlds, and these will be revealed by analysis of the aesthetic judgment. "The essential character of the aesthetic fact is," according to the writer, "one of judgment." She believes that subjective and objective factors in this experience will both emerge from her analysis of the logical subject and predicate in the judgment "This is beautiful." This view surely lays an altogether undue emphasis on the formulation of aesthetic judgments, and is hardly consistent with Miss Bartlett's own claim to impartiality. For why should the logical factor be more important for aesthetics than the psychological factor, than the work of art, than the object deemed beautiful in nature? It is a grave error to treat aesthetics as an offshoot of logic, and to regard propositions as being of the same importance for the former as they are for the latter discipline. I know that the fault lies by no means entirely with the author; for at London University, where she studied for her Doctorate, aesthetics still clings to the petticoats of logic, and has not yet attained the autonomous status it already enjoys at the leading Continental universities. Besides, "beautiful" is an unhappy predicate to choose because it unduly limits the range of aesthetic experience. Miss Bartlett herself recognizes (on p. 232) that in the case of her "aesthetic minimum" the judgment is not one of beauty. There are, indeed, many interesting problems arising from the verdict of taste, but the most important of these for aesthetics —I mean the question of whether a judgment of aesthetic value is normative or merely relative to individual liking—is not even mentioned in the pages of the present study. How soon will aestheticians realize that the methodological problem can never be solved in terms of *one* sovereign method; for if they start, as they should do, from aesthetic experience in all its amplitude and diversity, they are bound to apply as many methods—logical, psychological, sociological, genetic, *kunstwissenschaftlich*, and finally philosophical —as its multiform aspects demand.

However doubtful the author's choice of method may be, it has at least the merit of acknowledging that aesthetics is concerned with material objects as well as with immaterial minds. On this basis she makes her contribution of substance to the subject. Her subsequent chapters on the aesthetic minimum, on the creative activity, on appreciation, on nature, are always stimulating and well reasoned. But I cannot accept her aesthetic minimum, which is another formulation of the idea of distance or detachment in aesthetic experience, either as a factor common to every aspect of this experience or even as the central feature of appreciation. For it seems to me to be absent from the creative or "impulsive" attitude of the artist, and to be a necessary rather than a sufficient condition of the spectator's appreciation. Space does not permit a detailed criticism of this provoking study; but there are two observations about the book as a whole that call for utterance. The writer is manifestly partial to all forms and harmonies that delight the eye or the ear; but she will never go far in aesthetics until she is prepared to acknowledge the spontaneous warmth of feeling that suffuses the cold forms of art and nature with glowing vitality, with throbbing emotion, with winged desire. Finally, let me record my dismay when I failed to find reference in the bibliography to a single foreign work on aesthetics in the vernacular. The best things done in France and Germany are still untranslated; and how can we hope to improve on the classics so long as they remain unread?

LISTOWEL.

Art and Society. By HERBERT READ. (London: Heinemann Ltd. 1937. Pp. xix + 282. Price 10s.)

The social factor in the history and development of the fine arts is one that has long been neglected by theorists in this country, and it is therefore refreshing to find that Mr. Herbert Read has followed up his admirable work in other fields of the science of art by an examination of the relationship between art and organized society. This problem he studies in four of the seven chapters in his reprinted lectures at Liverpool University, and they are the pith and marrow of the book. His grasp of the basic relation between art and society is thoroughly sound; for the aesthetic impulse is rightly regarded as an "irreducible component" of the human mind, and cannot be derived—*pace* Marx—from any of the economic or social institutions established by gregarious mammals. Society is therefore the primary environmental factor influencing the artist and so determining to some degree the character of his work. Its importance is more evident in primitive than in civilized cultures, because the march of civilization leads away from social institutions and towards the solitary depths of individual consciousness; and Mr. Read does well to devote half his sociological study to palaeolithic and neolithic art, to the art of primitive contemporaries, and to the art of childhood. But he is not sufficiently sensible to the profound differences between these types of primitive art, nor, in so limited a space, can he embrace more than a few of the collective factors whose influence at this stage in art history is so marked. The latter criticism applies equally to his two succeeding chapters on the part played by the three main historical religions in the growth of civilized art, and on art in the modern era as a luxury commodity ministering to the vanity of the rich.

The three remaining chapters are a sad anti-climax, for Mr. Read has strayed inadvertently into what still remains for him the *terra incognita* of psychological analysis. We are confronted by an unhappy conversion to the Freudian method in aesthetics; "psycho-analysis," we are told, "is also the

key to most of the unsolved problems of art." It follows naturally that "the artist is always to be regarded as neurotic" and that the childish eccentricities of "super-realism" are the glorious apogee of modern art because they give free reign to the artist's unconscious impulsions.

LISTOWEL.

The Lasting Elements of Individualism. By WILLIAM ERNEST HOCKING. (New Haven: Yale University Press. London: Oxford University Press, Humphrey Milford. 1937. Pp. xiv+187. Price 2 dollars; 9s. net.)

This stimulating little book is an expansion and rewriting of the first series of lectures delivered under the Mahlon Powell foundation in the University of Indiana. The first three chapters are devoted to explaining what individualism is, and to accounting for the discredit into which it has recently fallen. In the first, Professor Hocking defines individualism and liberalism, and in the course of his attempt to justify and illustrate his definitions he maintains (amongst other interesting things) that the individual is logically, though not historically, prior to the State. In the second he urges that liberalism, though "the most successful conscious political hypothesis of human history" (p. 38), has failed in three vital respects: it has been hostile to social unity; it has encouraged the belief in rights without duties; and the emotional force which it now generates in its devotees is neither sufficient in intensity nor of the right nature. In the third chapter, on the "Dialectic of Liberalism," he offers a criticism of Mill's classic statement of liberal principles, considers how far Marx would agree with the diagnosis of the preceding chapter, and proceeds, through a comparison of the two thinkers, to the conclusion that the ultimate political unit is neither the pure individual nor the social organism (in both of which he disbelieves) but individuals equipped with the "joining function" and capable therefore of building societies.

In the remaining two chapters Professor Hocking becomes more constructive, in the fourth describing two "necessities of future societies," and in the fifth attempting to reconcile these together through the conception of the "co-agent State." The first necessity is for social unity, which he thinks can be most effectively achieved in an active State, by means of what he calls the "commotive function" and in illustration he considers the communist and fascist experiments, of which the activity and commotivity are of the wrong kind and produce a unity of the wrong kind. The second necessity is for the "incompressible individual," whom communism and fascism improperly neglect, and is expressed in the demand that "every man shall be a whole man" (p. 133). In the discussion of the "co-agent State" the main idea is that of the "extrapolation of will," according to which the citizen does not so much consent to the acts of his State as initiate them, and the State is not so much his representative as an agent carrying out his wishes, and especially the fundamental wish for its own continuance. After this idea has been introduced, the bulk of the final chapter is devoted to showing how it could be realized in practice, as it already is to some extent in small societies; and to that end Professor Hocking considers "what the State might do" in relation to some of the more important practical issues of the day.

Professor Hocking's main problem is thus the old and fundamental one of reconciling the demand for a free individual with that for a strong State by showing what kind of strength in the State is compatible with freedom in the individual. But he is more sensitive than many writers to the impli-

cations of both demands, supposing the truth to lie in some form of individualism and at the same time maintaining that in practice the chief need is for a strong State. Indeed, the most obvious interest of his book is in an attempt to re-state the individualist position in such a way as to do full justice to the defects of which we have recently become conscious. Moreover, he says much that is suggestive, if not original, in the course of the attempt. In spite of a somewhat compressed and fragmentary structure, and of an irritating allusiveness and obscurity of manner, the argument never fails to shed light on the topics with which it deals; and the illustrative material, though sometimes irrelevant, is never uninteresting. But the more constructive portions of the book are very briefly worked out, and are much less adequate than the other parts in their recognition of what human beings and societies are actually like. The "co-agent State" is admittedly only an ideal; and the attempt to show how it could be made real is hardly detailed or concrete enough to carry conviction. Nor is much attention paid to considering how in fact the "commotive function" could be exerted by (or on) ordinary men and women in untotalitarian ways, or to the difficulties involved in the demand that social unity shall be achieved by means of it. In actual fact human nature is surely such that it will only be exerted by a minority of people; the majority can do no more than have it exerted on them. But if this is so, the problems of liberty and equality will arise with a force to which Professor Hocking does not do justice. Even if, *per impossibile*, the function were exerted by everybody, it would be as likely to generate conflict as unity. We are also left in some doubt about the "incompressible individual." The chief point about him seems to be that the respect for him is a necessary condition of the survival of societies; but it is also suggested that he will in any case provide a safe bulwark against the final success of totalitarian encroachments.

Defects of this nature do not of course arise to the same extent in the earlier chapters; and the whole book is so short that it is perhaps unfair to criticize it for faults of omission. But it is difficult not to regret the absence from the third chapter of any discussion of a philosophical opponent of individualism. In these days, no doubt, the more Marx is discussed by philosophers, the better; but Bosanquet, to take the obvious example, so explicitly opposes Mill, and advances views so similar in many respects to Professor Hocking's own, that a few pages about him would have considerably illuminated the argument at this important point. At the same time, the reader cannot fail to be stimulated by the whole discussion; and in so short a book it is perhaps unreasonable to look for other virtues.

O. DE SELINCOURT.

Pascal: The Life of Genius. By MORRIS BISHOP. (London: G. Bell & Sons, 1937. Pp. xi + 398. Price 12s. 6d net.)

Professor Bishop, who occupies the chair of Romance language and literature at Cornell, has evidently found a congenial task in his study of the great Port-Royalist. He divides his book into sections, each corresponding to some aspect of Pascal's career. We begin with the infant prodigy and his family. We follow his early career in physics and mathematics, his experiences in the world, his love-affair, his religious conversion, his mysticism, his philosophy, his polemical writings, and finally the story of Pascal, man and saint, closes

when, after only 39 years of crowded life, a cerebral hemorrhage destroyed the great master brain of one of the world's major geniuses.

This is a singularly attractive book. The publishers have aided the author in making an admirable format, but the chief attraction is the skill of Professor Bishop who has made a historical study, fully documented and suited to every need of the student, as interesting as a novel. The reader who can lay aside this book after a moment's glance, must be a singularly constituted person. It is a model of what a biography should be. Professor Bishop succeeds in "getting inside" his subject. Unlike so much written to-day, this book does not seek either to laud or "debunk." It is sympathetic where sympathy is needed, critical where criticism is needed, without the sympathy or criticism getting in each other's way. Professor Bishop is not afraid of taking an independent line. Unlike most of Pascal's biographers, he believes that a genuine love-affair existed between Pascal and Charlotte Gouffier, and accepts the *Discours sur les passions de l'amour* as Pascal's work, inspired by his own experiences. The case against this view of the matter rests on the silence of some important witnesses and the improbability of an affair between a duke's sister and a poor scholar. But in view of the close friendship between the duc de Roannez and Pascal and the subsequent career of the lady herself, which gives full evidence of an otherwise unexplained mental conflict, there is much to be said for Professor Bishop's support of Victor Cousin's suggestion of Pascal's passion for Charlotte.

Professor Bishop's account of Pascal's conversion is sympathetically objective. Such transforming experiences are ground upon which no biographer can enter. He must stand without and wonder. Pascal lived and died an orthodox Catholic, yet always expressing the Calvinistic spirit of Jansenism. His respects to the Virgin were almost perfunctory. It was Christ Himself before whom Pascal knelt with adoration. Professor Bishop says he was "a genius attempting sainthood." In the ordinary sense Pascal was not a saint. Yet the picture of the brilliant genius, slowly burning itself out as the frail body sickened and wasted, is more touching in its pathetic resignation and penitence than any story of conventional sainthood. Professor Bishop is equally happy in his delineation of the intellectual and the spiritual powers of Pascal. He gives a full account of his investigations into the mystery of the vacuum in Toricelli's tube, of his mathematical excursions, and even of his part in initiating the first omnibus service in history, when his *cinq sous* carriages were put on the streets of Paris. Pascal's genius was too many-sided to issue in a definite philosophy, such as that of Descartes, of whose meeting with Pascal we are afforded a lively description. But Pascal's influence is reappearing to-day in the philosophy of Bergson, and as Professor Bishop says, "The world is full of lovers of Pascal. Who loves Descartes? Who loves Kant?"

Of the struggle between Jansenist and Jesuit in which Pascal took so prominent a part, we have here a full account. The influence of the *Lettres Provinciales* is still felt in the traditional French suspicion of the Jesuits. Voltaire credited them with fixing the French language. They made the plain man a moralist and something of a theologian. Protestants abroad seized on so handy a weapon of controversy. Yet in them is not the innermost revelation of Pascal. What that was, no reader of Professor Bishop's altogether admirable biography will fail in some measure to apprehend.

E. S. Waterhouse.

Theory and Art of Mysticism. By RADHAKAMAL MUKERJEE, M.A., Ph.D. (London: Longmans, Green & Co. 1937. Pp. xvi + 308. Price 15s.)

Mysticism is closely related to religion, in that it is a vital element in all true religion, and to philosophy, in that it is intimately concerned with the nature of Being, but it is to be considered first and foremost as representing an attitude of mind, the innate tendency of the human soul to seek to realize, and to enter into relationship with, that hidden Presence which is the Source of all Being. But while mysticism represents a certain attitude towards Reality, it has always assumed that such an attitude implies also a certain Way of life, which must be followed by those who seek fellowship with the Highest. Mysticism is therefore practical and active, and also self-giving, for it ought to mean that the mystic's contact with the Divine Life results in a fuller, richer life lived in contact with other human lives. "The perfect life," said Plato, "would be a life of perfect communion with other souls, as well as with the Soul which animates the universe."

This book, by the Professor of Economics and Sociology at Lucknow University, has three main aims. It seeks to present an objective explanation of the mystical life and experience and to show the bearing of religion upon human institutions: it also seeks to give a training in the art of contemplation; and finally it seeks to show how the study of mysticism leads to an appreciation of social values. "No adequate and comprehensive theory of social progress," Professor Mukerjee writes, "can afford to neglect the consideration of religion; and sociology, which regards all phenomena of human society as its province, should no longer relegate to the philosophy of religion alone the task of attempting a comprehensive formulation of the goal of man's collective effort and aspiration" (p. 8).

The author divides the types of mystical experience into four classes: first, the emotional type of mysticism, finding its satisfaction in a personal God, and among the representatives of this class he would include Hindu mystics of the Bhakti School, the Ṣūfīs of Islam, and Christian mystics; second, Nature mysticism, in which the personal Deity is superseded by the All-Being; third, unimpassioned mysticism, in which Reality is apprehended as absolute and modeless, and contrast between the knowing subject and the known object is lost; fourth, a type in which the quest of the soul and the quest of the Being, the way of knowledge and of love, are combined.

But the author is chiefly concerned to deal with Mysticism in its practical effect upon life, holding that it is mysticism which brings about equipoise in the inner life and enables a man to adapt himself to his environment, and everyone can and ought to be a mystic. In the author's view, mysticism is not asceticism in regard to the things of the senses, but rather consecration. He quotes Ekanath, an Indian mystic of the sixteenth century, as saying, "The senses that ascetics suppress, mystics devote to the worship of the Lord. The things of sense that the ascetics forsake, mystics offer to God. Ascetics forsake the things of sense, and, forsaking them, they suffer in the flesh; the followers of mysticism offer them to the Lord and hence they become for ever emancipated" (p. 131).

Professor Mukerjee holds that monotheism, with its worship of a Personal Deity, is inadequate to meet modern needs, and notes that there is to-day in the work of such Christian thinkers as Barth, Otto, and Brunner a tendency to emphasize the sense of mystery and awe before the unsearchable Divine Majesty, which he welcomes as tending towards freedom from traditional categories and symbols. He would like to see Christianity, Hinduism, and Buddhism prepared to coalesce, and enrich the religious experience of the true mystics of each religion.

Through mysticism, the author believes that the religious world-view can be reconciled with modern metaphysics. "The mystic's discovery of Reality in this world of many-changing things, his reconciliation of the monistic and pluralistic traditions, of immanence, incarnation, and transcendence can alone show the way towards the mutual participation and interpenetration of religion, metaphysics, and science" (p. 272). By mysticism alone (but chiefly by that of Mahayāna Buddhism) can metaphysics be saved from the crippling effects of the invasion of physical science, and human souls from the laws governing the motion of electrons and protons or the ceaseless flow of the evolutionary process. The Cosmic Eternal Spirit is the Reality which is outside and yet extends over time and space and the Cosmos. His persistent absorption with the Real enables the mystic to distinguish unerringly between truth and falsehood, and his inner certainty endows him with a courage and a determination that can rise superior to any bafflement and suffering, and so the mystic has often been an ethical pioneer, a religious reformer, an innovator in every sense of the word. To the mystic, social life and relations present some aspects of the absolute and eternal values, Truth, Beauty, and Goodness (which is Love), those attributes by which the Divine Reality is revealed to mankind: so fellow-man is seen to be the means by which the True Reality can be reached and served. "As the thin and shallow rivulet of man's life flows into the full ocean of God's activity, every act is done for the sake of fellow-man and inactivity becomes no leisure but meditation for the happiness of all" (p. 284). So the author's final conclusion is that between religion and society there is an endless reciprocity. The mystic vision is for ever shedding its rays upon our everyday life and experience, while the radiation of our love and thought for others is eternally renewing, with ever-growing brightness, the vital flame of vision.

This is a very interesting and suggestive book and closely reasoned. Certain of the chapters, those on Primitive Religion, Magic and Ritual, Religion and Economic Life, though interesting in themselves, have little bearing on the main thesis. Professor Mukerjee, throughout, is plainly influenced by his own personal conviction that in Buddhist mysticism is to be found that which will bring both religion and metaphysics into the close and harmonious relationship with the social order which is to be universally desired. Communion with a personal God, he says, cannot give lasting or perfect satisfaction. But in such a communion many millions of the human race have, in fact, found complete satisfaction, and have believed, too, that thereby they have found salvation. In spite of the scholarship with which the author's thesis is maintained, his wide acquaintance with Western thought, and his sympathy with human need, the reader may well doubt whether the solution of the problems of the present age can be found in a faith which has not—and perhaps never can have—a universal appeal.

The book is well produced and fully indexed, but it lacks a bibliography, and the supply of this need would add considerably to its value.

MARGARET SMITH.

Being and Being Known: An Introduction to Epistemology and Metaphysics. By WILLIAM CURTUS SWABEY, Ph.D. (New York: The Dial Press. 1937. Pp. xvi + 318. Price $3.50.)

This book is written in a very pleasing style, lively but unforced, graceful but not ornate, paying sufficient attention to accuracy of expression (for the most part) without frivolous nicety, provided that its intention be, as the

sub-title states, to supply an introduction to epistemology and to metaphysics. It should serve that purpose very well. It traverses most of the major philosophical categories, and has something pertinent to say on each of them. It briefly reviews a varied and important set of philosophical theories, some of them new, others not so new. It does not obtrude, although it lays proper emphasis upon its own point of view; and, nearly always, it has the high merit of preferring arguments to catchwords.

The general plan of the book, so far as it has one, is, firstly, to reject "naïve" and accept "critical" (or Lockean and frankly problematic) realism; secondly, to retain dualistic realism after discussing Kant's "phenomenalism," the "subjectivism" of Hume and of Mill, and various types of pragmatism; thirdly, to review the great epistemological theme of "ideas" and of "knowledge"; and, fourthly, to debate the categories of space, time, infinity, causality, substance, mind-body, and freedom in a spirit prevailingly ontological. While the last part of the book gives, in the main, special studies of these categories, an attempt is made to show that "realism" is committed to certain ontological conclusions. Thus (p. 150) "Realism, to be significant, implies a world which is *spatial* and *in space* in the ordinary meaning of these words." "Time is *really* real" (p. 165). "Physical reality, whatever it may be, is determinate" (p. 202). "The true reality is *formed matter*" (p. 216). If Heisenberg or the relativists deny any of these things, Mr. Swabey is willing to attack them vigorously.

It is more difficult to give an opinion on the merits of the book if its subtitle is too modest, and the work should be regarded as an independent contribution to its subject. Plainly the discussion is far too good to be called superficial; it is also too good to be called facile. But I think this author is capable of more solid work; and although, as I have said, he is usually accurate, he permits himself to write loosely on rather too many occasions. Thus it is hard to reconcile his view about time already quoted (p. 165) with the statement (p. 154) that the past "would seem to be a contribution of the mind itself." It is also difficult to know what Mr. Swabey means when he tells us that causality has the "genuine feature" of being "obscure to the intellect" (p. 179) and *also* (p. 282) that the "law of causation" is "unassailable from the standpoint of self-evidence." Again, it is hard to suppose that Mr. Swabey's view that we have each of us many selves (intellectual, emotional, social, etc.), but that the "true" self in contrast to these "aspects" is "all of them together in their proper proportions" is a weighty contribution to this part of his theme.

JOHN LAIRD.

Bishop Butler and the Age of Reason. A Study in the History of Thought. By ERNEST CAMPBELL MOSSNER. (New York and London: Macmillan & Co. 1936. Pp. xv + 271. Price 15s.)

That the author's name is unfamiliar will be explained by saying that he is an American, to whom the award of a fellowship from Columbia University has afforded opportunity for research work in this country. He is to be congratulated upon making excellent use of the award. This book is an admirably balanced, well documented, and eminently readable account of a thinker who, despite all that has been written upon him, still offers ground in his fruitful speculations for further study. As Mr. Mossner shows, Butler was distinctly a man of his age. During his lifetime two opposing tendencies to which he was alike hostile, Deism and Methodism, struggled against each

other. Intellectually, Butler was nearer to the Deist, morally to the Methodist, but he disliked the scepticism of the one as much as the "enthusiasm" or religious exuberance of the other. The width of Butler's mind, not less than the tendencies of the age in which he lived, accounts for certain inconsistencies, or unresolved positions, in his philosophy. Butler never finally balanced the account between conscience and "reasonable self-love." On the whole, it seems that it is the latter that has the last word, yet Butler will not expressly acknowledge that fact. Similarly, Mr. Mossner thinks that Butler never faced the general relation of conscience to reason, but implicitly abandons reason by insisting that its guidance alone is insufficient, and that it needs alliance with a divinely inspired conscience.

The interplay of thought between Butler's theories and the tendencies of his times is admirably worked out by the author. Possibly he hardly allows enough to the factor of Hobbes's philosophy. No Christian apologist to-day gives much weight to "reasonable self-love," and it is difficult to believe that this conception would have had the position it occupies in Butler's thought had it not been for Hobbes. Butler had no difficulty in breaking down Hobbes's psychological hedonism, but, as is often the case, the position demolished exerted an indirect influence in the construction of the opposing view. Hobbes is far more important in the reactions he provoked than in his own philosophy. Mr. Mossner has provided us with a welcome and useful addition to the literature of Butler's philosophy. It is all the more valuable because its emphasis is upon Butler's relation to his age, rather than upon the much more familiar topic of Butler's philosophy in itself.

E. S. WATERHOUSE.

Theory of the Democratic State. By MARIE COLLINS SWABEY. (Cambridge, U.S.A.: Harvard University Press; London: Oxford University Press, Humphrey Milford. 1937. Pp. 234. Price 2 dollars 50 cents.)

In this exposition of the theory of Democracy Professor Swabey delves deeply into the roots of politics. To her Democracy is closely dependent upon the quantitative character of science. Historically it has asserted itself contemporaneously with notable advances of the scientific spirit. Those advances consist primarily in the discovery of conformations and exactitudes of structure and measurement in physical objects on the inorganic plane, and it is to this quantitative science that Miss Swabey looks for the true origin and logical defence of democratic institution. In the functional triad of democracy the central factor is equality. Though individuals differ in their capacities, physical and mental, political institutions disregard these "intensive magnitudes" in favour of a policy of counting heads. "Suppose that work, need, capacity, and meritoriousness were all taken into account in estimating the benefits to be assigned to citizens. What would be the result? To begin with, some compensative rating of degrees of want and merit, labour and aptitude, would have to be worked out. Few would qualify on all counts. Yet, how proportionately should the State reward, for instance, the unscrupulous but successful producer of economic goods, as compared with the talented artist who rarely used his talents, or as compared with the 'deserving' well-intentioned person who made a botch of everything?" (p. 179).

In its attitude towards justice the assumption of equality in its numerical side seems necessary. Though work may seem to be implied in the State's attitude towards human needs, its evident inability to estimate the value

of individual differences of capacity and need justify this numerical treatment of equality.

Miss Swabey deals drastically with the dialectical and practical errors of Marxism, on the one hand, and biological mechanism on the other. Both are materialistic in origin and character. She appears in places to deny the assumption of evolution in any of its accepted senses, and to ally herself with that modern science which rejects causality in favour of treating nature "rather as a configuration of elements disposed in pure atomic jostlings and possessed of logical structure disclosed in relations of probability" (p. 49).

The distinctive quality for which democracy stands is for her a purely rational one. It implies a capacity peculiar to man and not derived from mere animalism. "He alone apparently has the power of responding to remote, inclusive, and non-existent objects, a capacity for universal-mindedness quite different from social-mindedness or the dog-like attachment to gregarious ends" (p. 217). Since Miss Swabey eschews any sort of psychical solipsism, it is difficult to understand how this universal-mindedness, non-existent in the anthropoid ancestors, enters the mind of primitive man. Why should not reason, logic, and a primitive scientific impulse be accredited to lower animals? Deny this and you are landed in a miracle. Miss Swabey is almost fanatical in her repudiation of any suggestion of a collective mind. For it may be utilized to support a State which encroaches upon liberty and equality in the false name of fraternity. Her individualism, though demanding equitable treatment in the equal provision of opportunities, permits no directly social motive to creep in. "The moral man, we should say, is not the socially motivated man, but the principled one who sets himself a standard and tries to live up to it" (p. 217).

"In so far as individualism signifies piggishness, pomposity, exclusive self-seeking, it may well be attacked. Yet it may equally well be defended as expressing the fact that society is composed of units, and that only as these units remain self-reliant, assertive, and responsible in their own right, does the group become so. Strong societies are made of strong individuals" (p. 224).

Democracy, as the positive constructive policy for promoting this individuality, is rightly encroaching upon many customary privileges of the classes, political and economic. But it must not by any general socialization destroy or impair those incentives to personal energy, invention, and risk-taking that are essential to material and mental progress by denying those gains which in most cases are needed to evoke and direct these creative powers.

This brief account cannot profess to do justice to the originality and skill with which Miss Swabey has tackled the many theoretical and practical problems of the democratic State. There is, however, one important theoretic topic on which I should like to comment. Her logic, mathematical in character, appears to hold that all apparently qualitative differences can ultimately be reducible to quantities. Politics, however imperfect as science, is yet science. But though the scientific impulse may have some independent character, can it be held to dominate and bring to any single standard of measurement the other interests of life, physical, moral, aesthetic? Experience attests no such dominion. Is value (as economists would have it) a purely quantitative conception? Are there not qualities, interests, desires, values that defy measured comparison. Though these vital questions do not, I think, impair the very important defence of democracy as applied to the life of the average man, treated on a basis of equality, they do come up in relation to the wider treatment of politics, economics, and ethics.

J. A. Hobson.

Christianity, Communism, and the Ideal Society. A Philosophical Approach to Modern Politics. By JAMES FEIBLEMAN. (London: George Allen & Unwin, Ltd. 1937. Pp. 419. Price 12s. 6d.)

To offer an adequate review of this volume, which expresses confident judgments on a wider range of subjects than the title itself indicates, would demand an amount of space which its intrinsic value would not justify a reviewer in asking, or an editor in granting; and I must content myself with a brief indication of its contents, and some comments on its merits or defects. Of the six chapters, only three are immediately relevant to the purpose shown in the title. The first chapter exposes the fallacy of Nominalism, the second states the viewpoint of axiologic realism; and the fifth deals with Science and its problems, some bearing they do have, but the full development of the themes is due to a second, and not secondary, interest. The terms Nominalism and Realism are used to describe any philosophy, or tendency in a philosophy, to base knowledge on particulars, or on universals. The adjective Axiologic in the title of the second chapter indicates that ideals or values as well as ideas are included in the universals. The writer casts his net of condemnation of Nominalism very wide, and encloses some fish which we would not expect to find there. He revives in his Realism the Platonic idealism, but he does not with Plato oppose the ideas and the images as substance and shadow, but finite actuality is for him the finite fragment of the infinite possibility of the logical and axiological order, and both actuality and possibility are real. God as infinite Unity is the source, from which descend the two currents of logic and value. He identifies this philosophical with the theological trinity of Father, Word, and Holy Spirit. Truth as belonging to the logical order is not one of the values, but the good, the beautiful, and the worshipful are. Religion is adoration of the Infinite Unity, not a personal relation to a personal God. He insists that science must for its progress not only implicitly but explicitly abandon *nominalism* (empiricisms) for realism (rationalism). It is significant that he passes from biology to social science, and ignores psychology; this is in accordance with his neglect of the subjective process of thinking by which the individual subject apprehends the objective universals. While there are in these three chapters defects of judgment, they seem to me the more valuable parts of the work, and should have more interest for the readers of this journal.

It is convenient now to pass to the last chapter, which deals with the *Possibility of an Ideal Society*. Under the guidance of the Logical Ethics of Peirce, whose disciple the author seems to be, he defines the ideal society as "the unlimited community"; the moral development of the individual depends on the constant expansion of the range of his social relations, the compass of the society of which he is a member. An undiscerning and, therefore, prejudiced account is given of *nominalistic individualistic liberalism*; but a *realistic social liberalism* is admitted as at least a temporary factor of progress until the ideal is realized. Here, as elsewhere, this constant insistence on the contrast of nominalism and realism appears not as a help, but a hindrance to the argument. Elements from Christianity which may be retained in the ideal are "the infinite worth of the individual, prayer as adoration, the validity of independent reason (Christ as the *logos*), the 'fragment' version of realism, need for the doctrine of immanence, belief in the triumph of justice over force" (p. 198). From Communism may be adopted "the Marxist analysis of industrialism, the need for exact social science, the recognition of actuality as finite and irreducible, the realistic existence of ideals, the dialectic logic of actuality, society as the individual goal" (p. 272). Chapter IV seems to me to be a competent and appreciative estimate of *Karl Marx and Communism,*

which, if the author had to make a choice, he would prefer to Fascism, on which he pronounces a deserved condemnation. Chapter III, on *Christ and Christianity*, is both incompetent and prejudiced. He imagines that he has disposed of Christian Metaphysics when he has criticized the metaphysics of Thomas Aquinas. He shows no trace of any knowledge of modern Christian apologetics which would make null and void some of his objections. He refers to A. E. Tayler's views as immortality at second hand (p. 375), in what to those who know that writer must appear a travesty. The account of Protestantism on pages 187–188 is nothing less than a grotesque caricature. He is equally abusive of professors of Philosophy (p. 278). His demand that mathematics should be applied to social science seems to me of very doubtful value. Again he arrogantly ignores all that has been done in this sphere (p. 323). The tone of the book makes an unfavourable impression. It is a pity that there is so much to detract from the merits of the book as an earnest and urgent plea for the recognition and application of reason and value to actuality.

ALFRED E. GARVIE.

In the Realm of Mind: Nine Chapters on the Applications and Implications of Psychology. By CHARLES S. MYERS, C.B.E., F.R.S. (Cambridge: The University Press. 1937. Pp. 251. Price 7s. 6d. net.)

This volume consists of a number of essays, originally delivered as lectures or discourses, upon important topics of psychology both pure and applied. No one is better qualified to speak as an expert of the practical usefulness of psychology in vocational selection and guidance or of the human factor in accident causation than Dr. Myers. But those who know of him only, or chiefly, as the Founder and Principal of the National Institute of Industrial Psychology will discover in this book that he is an expert equally qualified to speak on topics that belong to many other and diverse fields of psychology also. There is, for example, a delightful chapter on musical appreciation, another on social psychology, and a third on international relations. More purely speculative problems are dealt with in the chapters entitled "Psychological Conceptions in Other Sciences," "The Absurdity of any Mind-Body Relation," and "The Nature of Mind." One chapter is particularly addressed to members of the medical profession, though it will no doubt be read with great interest by others. It stresses the capital importance for the physician of a sound knowledge of psychology, since he has to treat ailing human beings rather than diseases, and should reckon with their minds as well as their bodies in his treatment. Since 1933, when the Bradshaw Lecture upon which this chapter is based was delivered, Dr. Myers's contention that psychology ought to be taught to medical students has been accepted by the authorities, in that the subject is now included in the medical curriculum. *In the Realm of Mind* is a book that should be welcomed by a wide circle of readers.

F. AVELING.

Education for Citizenship. By ERNEST BARKER. (London: Oxford University Press, Humphrey Milford. 1936. Pp. 17. Price 1s.)

Those who heard Professor Barker's lecture at the Institute of Education on June 8, 1936, will be glad to have it in print; and for others it will be no less valuable. Much has been written on this subject of late, but nothing wiser than this cautious statement. Professor Barker points out the inevitable dilemma that (i) if you educate for citizenship you educate for the State, as is evident enough in several countries; but that (ii) if you do not, you make it

impossible for democracy to continue. He finds a partial solution in three reflections: (i) that under democracy education must be directed towards fitting the citizen, not, as Aristotle says, "to suit the form of government under which he lives," but to *be* the government ("to make, control, and inspire it"); (ii) that education for citizenship is very far from being confined to the schools; and (iii) that it is only one aspect of the education of the whole man.

F. A. CAVENAGH.

Divine Causation: A Critical Study Concerning "Intermediaries." By W. J. BEALE, M.A., B.D., D.Phil. (London: Macmillan & Co. 1937. Pp. xv + 335. Price 7s. 6d. net.)

Dr. Beale desires to discover man's earliest beliefs about causation and the Supreme Source behind it. He then deals with the interjection of intermediary beings between that Supreme Cause and its effects. His intention is to show that this is a needless addition, and one that imperils the true conception of the Supreme Cause. He begins with an inquiry into origins, which is too scantily conceived to be of much use. Moreover, the list of authorities is not well balanced, and when, for example, Lowie's *Primitive Society* is once referred to as Lawrie's and the two other occasions as Lowrie's, it would seem that the investigation has been somewhat hurried. Passing to the more detailed review of Hebrew ideas upon the subject, Dr. Beale shows himself much more at home, and this section is well conceived and carried out. The conclusion is that intermediaries are necessitated by a false idea of the Supreme Cause as spatially transcendent, whereas Dr. Beale is concerned to prove that transcendence involves immanence, and the intermediary is needless. This leads to a polemic against the idea of angels. References to them in the New Testament are rejected as due to Jewish ideas interpolated by the writers, but a good deal of special pleading is needed to show, as Dr. Beale claims to have shown, that angels were not referred to by Jesus, and that the many mentions of them in His recorded words are due to the recorders. Why it should be necessary to believe that we are the only spiritual beings created is not clear. It seems ill to accord with the idea of the resurrection of the dead to which Christianity is entirely committed. Possibly Dr. Beale believes in unemployed angels. At any rate, after reading this interesting study the reviewer still remains, like Disraeli, on the side of the angels.

E. S. WATERHOUSE.

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CORRESPONDENCE

To the Editor of *Philosophy*

Sir,

In the July issue of Philosophy there appeared a review of my *Philosophy of Relativity* by Mr. Herbert Dingle, who contends that this book, although "undoubtedly worth reading" for philosophers, is not a "valuable contribution" to science. The reviewer might, of course, have made it clearer that I had no intention of contributing anything at all to science, that, as explained in the Preface to the book, the exposition of the relativity-theory is given there entirely for the benefit of philosophers without mathematical training; but this I certainly would not bother mentioning if it were not for the objectionable interpretation which Mr. Dingle gives to his contention. According to him, to say that philosophical speculation about the concepts of relativity does not contribute anything to the science of physics, is the same as saying that it is irrelevant to an understanding of the nature of physical reality—in his own words, that "the relation of any scientific theory to philosophy is simply the relation of science in general to philosophy, and that is not at all affected by the advent of relativity." These words are simply not true to facts. In the history of philosophy before "the advent of relativity," the philosophies of events in spatio-temporal relations as contrasted with the philosophies of substances in mutual transactions were not, and could not be, heard of.

With regard to Mr. Dingle's specific illustrations, which are my speculations about the reality of space-time, solipsism, and motion, I should likewise disagree with him that they are irrelevant to or unaffected by relativity. To take the question of the "reality" of space-time, a philosopher of nature is bound to discuss it, since some of the physicists themselves (the operationalists) hold, in disagreement with the majority of scientists who have tried to treat scientific theories as descriptions of nature, the philosophical opinion that space-time is not an objective reality but merely a pragmatically useful scheme.[1] But there is no need to argue my point, because Mr. Dingle himself, naïvely overlooking inconsistency, admits the relevancy of science to philosophy when he says that the problem of reality is "closely connected" with the question of solipsism and that a "cardinal feature" of relativity is that it is "in conformity" with solipsism. If instead of arguing that relativity as science has nothing to do one way or another with solipsism, Mr. Dingle can argue that the two are "in conformity," then certainly I have the right to argue that they are incompatible, especially if my argument, as I am going to indicate, is the better of the two.

Mr. Dingle writes: "Relativity identifies 'another observer' with 'myself using a different co-ordinate system.' If there is another observer whose experience of mechanical events I cannot myself describe simply by changing my co-ordinates, relativity leaves him entirely out of account, however 'real' or 'independent of the mind' he may be."

If this means that relativity is in conformity with solipsism because it describes events which might be experienced by a single observer, then Mr. Dingle is wrong because he overlooks that besides mechanical events relativity describes strings of events with space-like and zero-intervals which cannot be observed by a solipcist for the simple reason that they transcend observation. In this connection it is important to understand that independently of any philosophical speculation

[1] Although it does not help Mr. Dingle's general contention, he could not refrain from a dig at my definition of reality as being independent of the mind: "Except that mind must be unreal, this tells us nothing. . . ." Even disregarding the fact that I gave my definition in a discussion of physical reality, this remark of Mr. Dingle shows an astounding ignorance of the traditional philosophical context in which "independence of mind" is taken in opposition to the subjective idealists' "dependence on mind as an idea." In this sense a mind is independent of a mind, and is real for it is not a mere idea of another mind.

relativity as science has no discrimination in favour of time-like intervals being more real than the other two. But even if, for the sake of argument, all but mechanical events are disregarded, the existence of alternative frames of reference in Relativity is certainly incompatible with the proposed identification of "another observer" with "myself using a different co-ordinate system." For while systems are moving relatively to one another, I can use only one of them at a time. Of course, I can change from time to time my co-ordinate systems, but if I do I am not the same percipient event after such a change. And the admission of the existence of percipient events other than the one which is the solipcist's experience at the present moment is tantamount to a rejection of the thesis of solipsism.

I wish to add a word concerning Mr. Dingle's remark that my "writing, though lacking distinction, is clear." The remark is an expression either of the discredited opinion that style is separable from content or of a regrettable request for such "embellishments" as the reviewer uses himself when he writes, for example, that my book "drags relativity, so to speak, into an atmosphere in which it cannot breathe, with the result that we have two unconformable sets of ideas forced into an unnatural union."

Yours faithfully,

A. P. Ushenko.

University of Michigan.

To the Editor of *Philosophy*

Sir,

Professor W. T. Stace's article on "The Place of Philosophy in Human Culture" is so interesting that I regret its containing a reference to Herbert Spencer which will undoubtedly mislead all who have no acquaintance with that philosopher's works. Professor Stace says that Spencer's conception of the business of philosophy "finds no place for many of the problems which have always been regarded as essentially philosophical . . . for example, the problem whether the material world is in any way dependent for its existence upon mind," as "asserted in the past by idealistic philosophers." Spencer's philosophy certainly does find a very large place for the discussion of Idealism, for in the *Principles of Psychology*, fourth edition, well over 200 pages are devoted to the subject—being the whole of Part 7, vol. 2. Seeing that the entire work covers some 1,400 pages, it will be seen that Spencer gave more than one-seventh of his space to the question of Idealism.

Of course, the work I have mentioned forms two of the ten large volumes in which the whole of Spencer's Synthetic Philosophy is developed.

Yours very faithfully,

George Eastgate.

28, Stanley Road,
Woodford E.

To the Editor of *Philosophy*

Sir,

Since Mr. G. R. G. Mure has evidently been at considerable pains to collect the facts relevant to his interesting study on "Oxford and Philosophy" (Vol. XII, No. 47), it may be worth while to correct a slip on pp. 295 f. It is there stated that "the first three *Tracts for the Times* were published in this year [i.e. 1833]." Actually the rate of progress was much more rapid. The first three were issued on one day—Sept. 9, 1833—and no less than twenty were out by the end of December. See, e.g., H. P. Liddon, *Life of Pusey*, iii, 473 f.

Yours faithfully,

F. L. Cross.

Pusey House,
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